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AUTHOR Goodall, Richard L.
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ABSTRACT

The benefits and acceptability of marketing in postsecondary education are examined in response to evidence that indicates an increasing number of colleges and universities are turning towards the adoption of strategies and modes of administrative thinking that reflect commercial marketing techniques. The trend to use commercial techniques is attributed to two factors: (1) the growth of the 'Education Industry' has met and now exceeded the traditional sources of demand which are believed to have stabilized, or even shown a downturn and (2) other institutions are reporting successes both in attracting and retaining traditional student enrollments and in developing new ranges of educational services that will promote growth and ensure their survival. Chapters include: application of a marketing orientation in higher education, including pressures and resistance to marketing; a framework for educational service marketing which offers an 11-component model covering institutional mission, goal setting, situation analysis, service market analysis, service market planning, pricing, promotion, delivery, results, audit, and research data; and recent research and resources in marketing. Three major conclusions emerge: when an appropriate marketing system is followed by managers, immediate benefits may be visible to the institution; a wealth of resource materials are available to administrators for assistance in integrating a marketing plan; and marketing management is not a panacea for all threats to organizational survival. Appendices include community impact studies, market planning documents, list of marketing strategies, and 18 'publics' of an institution. A bibliography is provided. (LC)

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MARKETING POST-SECONDARY EDUCATION

IN THE U.S.A.

Ric Goodall

Univerity of Nevada - Reno

and

Prahran College of Advanced Education

Australia

November, 1980.

HE 013 592

SYNOPSIS

This research project is an examination of the growing literature in the field of marketing in post-secondary institutions in the U.S.A. Generally it is acknowledged that marketing techniques have always been employed in colleges and universities, however it is only in recent years that this area has received considerable attention. To a large extent, debate on the topics of what constitutes 'marketing' and to what extent it should be used in the, mainly non-profit, 'service' area of higher education is not particularly productive.

This paper tries to answer two specific questions: Whether the explicit adoption of a 'marketing orientation', that is, an articulated set of concepts concerning the exchange of goods and services, has been widely accepted? And whether it has proven beneficial to a large number of post-secondary institutions?

Generally, the literature seems to suggest that increasing numbers of colleges and universities are turning towards the adoption of strategies and modes of administrative thinking that directly reflect 'marketing techniques' used in the commercial world.

Two factors appear to have hastened this change. The first is that the growth of the 'Education Industry' has met and now exceeded the traditional sources of demand which are believed to have stabilized, or even shown a downturn. The second related

factor is that other institutions are reporting successes both in attracting and retaining traditional student enrollments and in developing new ranges of educational services which will promote growth and ensure their survival.

Three main conclusions emerge. The first is that when an appropriate marketing approach is followed by management, immediate benefits may be visible to the institution, that is, to those individuals whose livelihood is linked to its survival; to its clientele, that is, predominantly, its present and potential student body; and to various sectors of the public at large. The second conclusion is that a wealth of resource material is available to assist administrators employ the various aspects of an integrated marketing plan. The final conclusion is that 'marketing management' is not a panacea for all threats to organizational survival.

Marketing techniques have been employed for many years by successful educational administrators, perhaps in many cases without being labelled as such. What has become much more evident in recent times, initially in the community colleges and more lately in others sectors of higher education, is that more administrators are more openly acknowledging that more formalized marketing approaches are vital to long-term institutional viability.

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1. INTRODUCTION

1.1 Nature and Scope of Study

This study is primarily a review of recent literature on the topic of utilizing service marketing concepts in the administration of post-secondary institutions in the United States of America. The scope of the literature involved includes a number of texts covering both the broad field of marketing in general and more especially those that concentrate on the marketing of services rather than physical products. Much of the literature reviewed deals with the application of various marketing techniques or approaches in applied institutional settings. The bulk of the material of recent date is drawn from the experiences of community colleges. The concentration in this area is thus a result of the composition of the literature rather than a wish to emphasize marketing in this sector of higher education.

Three related processes are applied in the analysis of the quite extensive literature on the topic of 'marketing in colleges and universities'. The first is to briefly report the views of those writers who address the two following questions: 1. "What is actually meant by 'marketing' in the context of higher education?" 2. "Is marketing really appropriate in this sphere?". The second approach is to identify and relate

literature that can be seen as complementary to the development of a proposed model of educational service marketing management. The third phase is to review a significant amount of the relevant recent literature and to relate it to components of the theoretical model and to prepare a reasonably extensive annotated bibliography from which it is possible to identify cases, resource materials and other information useful to educational administrators interested in further research and application in more specific circumstances.

1.2 Objectives

This study has four broad objectives. The first is to foster both awareness and understanding of the potential role of a more formal approach to marketing management in a college or university. The second objective is to develop a theoretical model which is appropriate to marketing in a post-secondary educational institution. The purpose of this model is to act as a frame of reference in studying the current literature and also for implementing particular aspects of an integrated marketing plan in a practical setting.

The third objective is to report specific techniques, practices, and cases where 'service marketing' strategies have been employed, noting in particular the documented outcomes of those instances. The fourth objective is to identify appropriate methods for the introduction of market-oriented

outlook into an existing administrative structure of a college.

1.3 Limitations and Delimitations

The major delimitation to this study in the field of marketing in post-secondary education is that it is based upon available recent literature. This provides two constraints. It does not verify that the literature on this topic has in fact increased over the past 10 to 15 years; and perhaps more importantly, nor that increased attention has been paid by educational administrators to the marketing implications of their decisions. A further complicating factor is that there is no clear-cut boundary between what is 'marketing' and what is not.

> "Marketing is human activity directed at satisfying needs and wants through exchange processes" (Kotler (2) : page 5)

Most definitions of marketing, such as the one above by Kotler, tend to extend the concept into many areas of practical concern to educationalists and the subjects for many writers, which have not previously been thought of as 'marketing'. Admissions policies, course development and evaluation, technical innovations and mission statements are a few examples of this type.

Another delimitation is that reliance is placed on the

reported literature as an accurate reflection of events, cases and practices in the real world. There may well be a presumption of a 'halo' effect here. That is, written reports may tend to exaggerate favorable and successful introductions of 'marketing strategies' and minimize failures and unfavorable consequences. No articles could be found on the topic of "Why a marketing approach failed at XYZ College". The nearest to a negative view is where reports indicate certain areas were not 'up to expectations'. This probable bias is unfortunate as often as much can be learned from cases of failure as from successes.

Similarly, the "Hawthorne" effect may need to be borne in mind. Through an enthusiasm for the experimental and the innovative, educational administrators may produce results which are reflections of the change itself, rather the the factor which is being changed.

Again favorable changes in factors such as enrollments of adults may coincide with introduction of a new marketing strategy. The enrollments may have increased primarily because of external factors such as demographic patterns and broad attitutinal changes in society. The college or university may conclude that the increase was a result of its new courses and innovative promotion strategy. On closer examination, it may well be that a number of inextricably mixed factors were responsible.

Finally there is a factor which appears to operate quite markedly in education. That is, a number of techniques or concepts are borrowed from other disciplines they receive a great amount of short-term interest, but then wane when the next concept or approach comes into vogue. Care needs to be taken to evaluate benefits that are claimed under such circumstances. The results reported for approaches such as 'Management by Objectives', 'Accountability' and 'Marketing' may be unduly influenced by a fervour to support a new 'movement'.

Despite the unknown influence of these limitations, which may prevent a theoretically objective evaluation being made, there remains a substantial body of literature which has the potential to enable better administrative decisions to be made in an educational environment. Thus while the limitations and delimitations to this study are recognized, it is considered that the possibility of beneficial outcomes in practice is of greater importance.

2. APPLICATION OF A MARKETING ORIENTATION IN HIGHER EDUCATION

2.1 Pressures for Adopting a Marketing Approach

Fram points out that it was not until the early 1950's, accompanying the post-war surge in commercial production, that a more disciplined and formal approach was taken to marketing in general. Many writers acknowledge that the recent interest in applying marketing principles to institutions of higher education has been fostered by a diminishing pool of high-school graduates, rather than a keen awareness of the importance accorded marketing in the commercial world.

It also appears that in a sense some institutions have been 'pushed' towards marketing through independent societal changes. New emphases on life-long learning and adult, part-time attendance, changed technology and broad attitutinal changes to the nature and purpose of the educational process have changed the characteristics of the typical college student. In fact, the 18-22 year-old, full-time, middle-class, high-school graduate stereotype of the 1950's has become increasingly less representative of post-secondary education in the 1980's. Thus in one sense adaptation to changing market structures, as advocated by marketing literature, may be said to have occurred with little explicit or conscious direction by administrators. Some institutions may have initially adopted marketing

strategies in 'reactive' ways, but then have recognized the potential benefits and become more directly 'innovative' after their initial experiences.

Whether institutions have consciously 'pushed' themselves into marketing approaches, or been 'pulled' by declining traditional markets and changed internal demands for services, many administrators have increased the emphasis in this area of their institutions. Success with marketing strategies by other colleges and universities has itself created further pressure and the community colleges have provided a prime example of this form of encouragement by example. Indeed, the change from 'junior colleges' to 'community colleges' has been a highly successful promotional technique for many institutions. As noted by Norris, Johnson(2) and Keim(3), the community college 'movement' occurred at a time of environmental shift in attitudes to education, particularly dissatisfaction with the 'product centered' educational approaches of traditional four and six-year colleges and universities. Whether a previously unmet demand existed, whether the junior and community colleges changed and multipled in response to a new demand pattern, or whether these colleges were largely responsible for the demand for their own course offerings are issues for conjecture. Nethertheless the community colleges have provided the majority of recently documented cases of 'marketing successes'.

Some four-year institutions and two-year private

institutions have seen the growth of the community colleges as a competitive threat to a limited number of available students and adopted similar marketing techniques as part of their defensive strategies. Other 'more positive' institutions have recognized that the approach, rather than particular techniques, were responsible for community college successes, and sought to develop distinct and often complementary market segments. The complemntary nature of education services is reflected in Davidson's finding that 54% of community college graduates went on to further education at four-year colleges and universities.

Although there is much uncritical literature advocating adoption of marketing approaches (e.g. Comfort, Coppock and Gaither), the survey data on the attitudes of administrators indicates great diversity of views on what constitutes a marketing orientation. Alexander found 90% of responding administrators favored marketing techniques and over 70% were currently using them. Murphy and McGarrity however found 90% of respondents equated marketing with 'promotion'; similarly Sussman reported that 50% of presidents of institutions related marketing to a product or sales orientation. Over 70% of respondents to these last two surveys were 'satisfied' with their institution's 'marketing' techniques. However Murphy and McGarrity found less than 3% had marketing plans that could be termed comprehensive. This finding was supported by the study undertaken by El Sharei.

2.2 Resistance to Introducing Marketing Approaches

While the weight of the literature is strongly supportive of marketing in higher education, a few writers have provided, if not opposing views, then at least strong pleas for restraint in the adoption of certain 'marketing' activities. Three main themes are evident in this type of literature: 'Promotional Excesses', 'Consumer Duress' and 'Mechanistic/Product Oriented Attitudes' to the outcome of post-secondary educational experiences.

Under the heading of 'promotional excesses', Fiske and Vaccaro point to examples such as the distribution of frisbees on beaches during vacations, giveaway scholarships, unnecessary student loans, and rebates for students enrolling friends. Similarly the growth of internal and professional consultants and promoters and the sale and use of mailing lists has been reported. It should be noted however that advocates of comprehensive marketing approaches such as Kotler(4) also disapprove of these tactics, recognizing that the notoriety of these schemes has made more conservative educational administrators reticent about investigating 'marketing' more thoroughly.

The second negative factor of 'consumer duress' has been discussed by Hugstad, Litten(1) and Pernal who consider that educational institutions may abrogate higher social

responsibilities by following a policy of unquestioning compliance with short-term customer demands, which may not in any case be in the students' own long-term interests. These writers also note that the outcome of the educational process is not like the purchase of a tangible product in that each student contributes to his or her own education. Further the 'purchase' is a continuing sequential series of decisions and 'price' in terms of opportunity costs extends well beyond the cash amounts for tuition and other fees.

Two opposing views can be noted on the 'consumerism' question. The first is that some 'culturally enriching' courses may not be popular but should be continued in spite of low market interest to maintain an intellectual heritage. To counteract this point of view some educational marketing proponents argue that skilful promotion should be employed to highlight the benefits of these courses to students. The marketing approach does encompass both stimulation of demand and product modification to increase relevance to present-day students. Stark argues that 'educational consumerism' does have its place, and that many improvements to the truthfulness of educational advertising and the specification of the rights and obligations of students can be traced to this 'movement'.

The third major classification of objections to increased marketing in education is that it implies a mechanistic/production outlook to the outcome of the complex

educational process which cannot be viewed as a simple exchange transaction. Two answers to this challenge can be made. Firstly, while there certainly are differences between education and 'consumer goods', there are also many similarities. An individual can choose whether or not to make the economic and other sacrifices necessary to undertake post-secondary education and has expectations of satisfying his perceived wants. The second factor reducing the validity of the objection is that the type of marketing plans advocated by most writers are sufficiently sophisticated to recognize both the similarities and the differences in higher education and other products and services. A marketing plan should be uniquely specific in time and place to one organization. If a plan does not recognize the special aspects of higher education or the idiosyncracies of a particular institution, then this is a reflection of poor planning; it does not follow that planning itself is inappropriate.

3. A FRAMEWORK FOR EDUCATIONAL SERVICE MARKETING

3.1 The Need for a Model

It has been noted previously that there is widespread diversity in the definition of the term 'marketing'. Further, that disagreement on the application of marketing principles to higher education resolves into marginal divergence of views on particular aspects of the broad process and the degree to which they are directly transferable from the commercial world to an academic environment. A similar, and generally unnecessary, confusion can arise in developing a framework on which to base more detailed discussions.

The literature provides evidence of 'comprehensive', 'total' and 'integrated' marketing plans of between four and twelve or more sub-divisions. On analysis, they generally cover the same points, with a major item in one becoming a sub-item in another, items being combined and differing terminology being used. Kotler's writings in the field of marketing are widely recognized, however his works have not provided a standard marketing plan which has been used for discussion in this discipline.

Before presenting a model into which it is relatively easy to merge the theoretical structures used by most other writers,

it is emphasized that the model is representative of a total system. The component parts are integrated and articulated sections of a whole pattern. The model is intended to act as an aid to understanding the whole system rather than as an end in itself.

A model or framework, is necessary because a theory of marketing, as evidenced in marketing plans is multi-faceted, sequential to a degree, and complex. A number of matters raised quite frequently in the literature, such as the point that promotion and advertising are not synonymous with marketing, and the vital role of adequate market research, become quite evident if a model is used which relates these aspects to other factors in a total scheme.

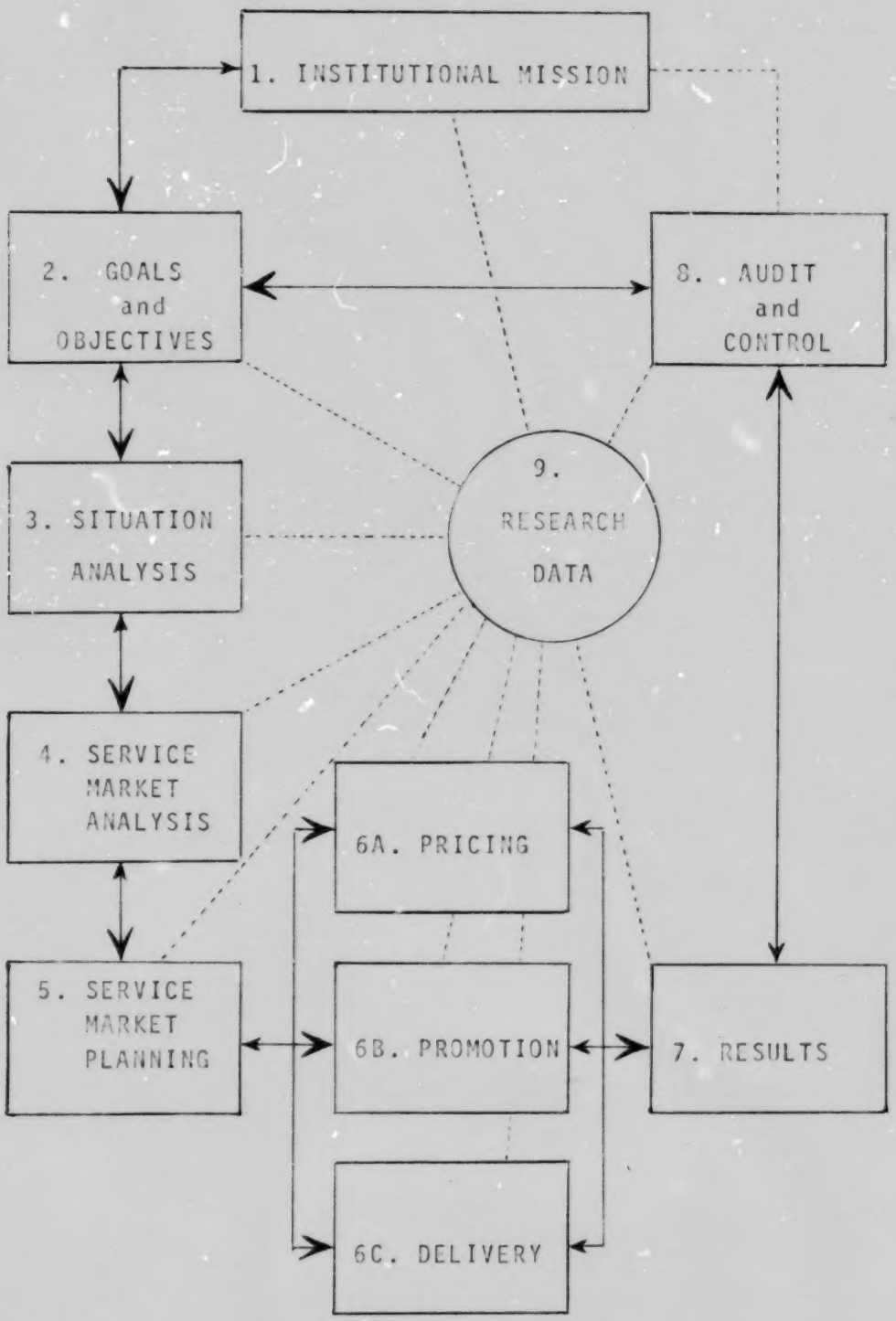
3.2 An Eleven-Component Model

The model presented here represents a development on outlines presented by Tarpey et al and Wilson. In outline, it is a continuous marketing management control loop with general applicability outside the educational sphere. While having more 'parts' than the marketing concepts advanced by most other writers it does have the advantage that these varying plans can be subsumed within its framework.

In this model, information and research is centrally placed to indicate its pervasive importance for decisions in the other

ten areas. The main direction of the plan is forwards (anticlockwise) from 1. Institutional Mission through to 8. Audit and Control Action. This line of development is represented by the large arrowheads; however the process is seen as both iterative and interactive. The iterative nature of market planning is represented by the small arrowheads referring back (clockwise) to prior areas when constraints and needs for revision are identified. An example of this would be when an institution has set short-term objectives which are in accord with both its mission and its long-term goals but for which it lacks required resources. Thus the planning team will need to modify at least short-term objectives and possibly longer-term goals. The fact that each component on the diagram is related to each other component should be recognized, however this has not been shown on the diagram to avoid undue complexity. The discussion following the diagram is not extensive as the intention has been to highlight key issues and provide cross-references to pertinent literature in the annotated bibliography.

A MODEL FOR MARKETING HIGHER EDUCATION



3.2.1 Institutional Mission

Arguably, the single most important component of a comprehensive marketing plan is the statement of a broad philosophy or 'institutional mission'. Many institutions operate without formally or explicitly stating the purpose of their very existence. Because a mission statement is by nature non-specific and intangible, many writers tend to give this aspect scant attention. However a well-developed mission statement provides both direction and a reference point for assessing each of the other components of a comprehensive planning and control model.

Most of the increasing number of educational institutions that have developed mission statements, refer to the provision of services which satisfy identified needs in a particular segment of their environment. Unlike 'goals' which tend to be inward-looking, attention to 'mission' emphasizes a service-transfer fuction which is exactly what is required for a marketing orientation.

The communication of a mission statement which can be written, can generate a greater sense of purpose within an institution and provide a basis for testing which courses of action should be followed in making decisions. Trivett(2)

suggests that the formulation of a mission statement can lead to expanded markets after it is recognized that past activities only partially satisfy the attainment of the broad mission. Hodgkinson notes that the process can lead to the shedding of irrelevant functions which have distracted attention from satisfying the institution's major purpose.

Gleazer makes the important point that institutional mission is the foundation for the successful creation and communication of an image in the community, and that the process of developing a statement of institutional mission is a difficult and ongoing task in a changing environment. Rio Salado Community College (p.21) has captured the essence of these views:

> Goal Number Three - To respond to the learning needs of a comlex and changing society.

3.2.2 Goal Setting

The setting of goals is widely reconized as a prime ingredient of a comprehensive marketing plan; however many writers such as Kotler (3), place it after analysis of the general environment and market assessment activities. In the model developed here it precedes these fuctions although the iterative nature of the planning process is emphasized.

The long-term goals may be described as attainments which will reflect progress towards the fulfillment of the

institutional mission. The generalized and intangible philosophy or 'posture' is translated into measurable, time-defined outcomes. The short-term objectives are more concrete specifics to which the organization addresses its current activities. They provide a logical first step towards the satisfaction of the educational enterprise's aspirations.

All major aspects and activities of the life of the college or university need to be incorporated into the goal-setting process, for it is against these targets that the total level of success can be judged. Budgets and enrollment levels for various types of course offerings are commonly thought of in the context of goal-setting however the field is much wider than this. The introduction of new programs and the phasing out of old ones, attrition rates, levels of impact and satisfactions with all 'publics' with which the institution deals can be planned and measured. Competitive position, program standards, public image, academic standing, student and alumni loyalty, professional recognition, cost/revenue efficiency and effectiveness, physical resources and levels of grants and endowments are all dimensions of an academic setting for which, with thought, goals can be set.

The reason for listing goal-setting as the second phase of an integrated marketing plan is to ensure that the present resources and constraints do not unduly inhibit the planning process. Rather than undertake an assessment of an existing

situation and project this into the future, the approach advocated is to establish the 'milestones' to be passed before considering the means of getting to them. Modification may well be necessary at a later stage but this is more likely to be to overcome obstacles rather than accept them as inherent in the task of goal-setting itself.

3.2.3 Situation Analysis

This phase of the marketing plan involves three related steps. In the words used by Kotler(4) and Wilson they are: generic service definition, target group definition including resource assessment, and portfolio planning. The first simple step involves widening the concept of the market in which the organization has operated. Wilson mentions railways and accounting firms as two examples where a wider concept of the service market has lead to successful extended fields of activity.

This 'generic field of activity' approach is evidenced in educational literature with the following areas being identified as extensions to the traditional market: older citizens (Scanlon), handicapped and minority groups (Rinck), retirees and education for recreation (Otto), foreign students (Armenio), women (Boyer, Schley), adults (Moon, CEEB) and transfer students (Leister and MacLachlan).

The second stage involves an assessment of the institution's ability to satisfy demands for the wide range of services in the chosen generic field. To do this, the college or university must take stock of tangibles such as physical plant and financial and personnel resources and also the intangible image and reputation it has established. This stage is a prerequisite to the third step combining what Wilson calls 'target group definition' and Kotler(4) terms 'portfolio planning'. This means 'zeroing-in' on certain segments where the institution feels it has certain advantages in meeting potential student wants. This in turn becomes the basis for identifying the most appropriate hierarchy of schools, courses and faculty. This stage also requires an evaluation, under existing conditions, of both present and future program viability.

3.2.4 Service Market Analysis

The fourth phase of the comprehensive marketing model, 'situation analysis', involves predicting the environment in which the educational institution will function. The usual method of undertaking this task is to evaluate data available from sources outside the institution; although more institutions appear to be supplementing this with their own research surveys. Governmental agencies, educational associations and boards produce a considerable volume of statistical material pertaining

to higher education. Broader economic and social data from a wide range of secondary sources is also available and may be useful.

Against this 'macro-environment' it is necessary for an institution's administrators to assess the way in which it will be effected during the term of the marketing plan. These influences must again be divided into their predicted effects on various sectors of the institution's activities. Demographic studies are a common example of research in this area. Doermann's study of this type has predicted a national average decline in high-school graduates to 1990. Linney notes that intrastate migration is declining and Parker reports a marked trend to vocationalism in higher education.

Many institutions rely on these broad predictive studies perhaps supported by trend analysis of their own past data records. Such institutions are unlikely to be quickly responsive to the particular environment in which they operate. Keim(2) provides a report of a detailed research project for a community college district, which facilitated more accurate planning to the year 2025. In most cases it is necessary to undertake some investigation of the micro-environment because it may differ significantly from the overall conditions expected. Many institutions find that the 'uncertainty factor' in future projections is not a severe problem and that often considerable information is readily available from local secondary sources.

In the past, few institutions appear to have prepared adequately for changing circumstances which were recognizable well in advance with minimal research effort. Full analysis of a service market requires an understanding of the way in which the macro and micro-environmental conditions impact upon the area in which a college or university operates. This can be developed through a study of historical trends or by monitoring certain other institutions ('market leaders') who experience the effects of environmental factors more strongly, or at an earlier time. The prediction of the likely impact of social, economic, legal, political and technological changes on the institution's student market segments, and co operating and competitive institutions is not easy. However this 'awareness' is a vital factor in a comprehensive marketing plan.

3.2.5 Service Market Analysis

After considering its generic field of service, identifying suitable target segments and likely future environmental influences in its market, an institution is able to begin detailed planning. In this phase recognition is given to the fact that the institution interfaces with a number of groups other than students. These groups termed 'publics' by Kotler (1,p.17), are "a distinct group of people and/or organizations that have an actual or potential interest and/or impact on an organization". Berry and Allen's classification of

eighteen such publics is shown in Appendix D. The management of relations with all of these publics is part of an institution's marketing function. These publics include various levels of government, governmental agencies, service organizations, the business community, past students, local high-schools, faculty and staff.

An appreciation of the extent of an institution's social interactions is reflected in a growing body of literature, particularly notable in this field is the work of the National Center for Higher Education Management Systems (NCHEMS). The research structure used by NCHEMS analyses four 'impacts': economic, educational, social and technological; and three outcome dimensions: time, type and audience - specifically students, former students, family and relatives, faculty and staff, interest based communities and populations classified by age, education, income, occupation and sex. Gorman observes that the current trend in many institutions is to over-emphasize the student, the 'primary consumer' of education to the neglect of other publics, and that this may be detrimental to the long-run support of the other participants in the market.

A recurring theme in the literature is that more detailed market research will be required about factors influencing the decisions of their potential target markets. Portugal states that although stressing research activities, colleges and universities themselves do little market research and do not

practice the managerial techniques that are commonplace in the business world. Cauley, Chandler and Mudie investigated the decision-making behaviors of potential students, finding that certain areas such as financial implications were paramount, also that students were significantly influenced by 'uninformed sources'.

Kraushaar, Stecklein, and Coffey and Nordstom have conducted research with 'publics' relating to institutions through employment. Kraushaar found the college was an important 'industry' in the local area. Stecklein's study and that of Coffey and Nordstom investigated the needs of local businesses for the future graduates of courses proposed to be offered by an institution.

3.2.6A Pricing

An area of marked difference between academic institutions and businesses is the attention focussed on the pricing of services provided. It is generally accepted that most institutions do not set their charges to recoup, with an allowance for profit, all relevant costs. Nor is the concept of pricing on the basis of what the market will bear used to any extent. If an excess demand exists for limited specific educational services, other mechanisms such as standardized test scores or past grade-point averages are used to determine which students will be permitted to enter their chosen course of

study.

Generally institutions do not set tuition fees on the basis of costs identifiable with particular courses. The most frequently used structure is one that has a single rate per credit hour for undergraduate courses and a higher rate for graduate credit hours, irrespective of the cost that could be traced to each student attending each course. The basic structure may be adapted slightly for courses using identifiable consumable materials, such as a photography class, also out-of-state levies may be imposed in some public institutions. However the close attention paid in business to cost-revenue relationships is in large measure absent from colleges and universities. The concepts of cost and profit centers also has not found favour and administrators appear to direct their concern to the bottom line result figure.

Little research work has been undertaken in the field of pricing higher educational services. Both Krachenberg and Fram(1) note the lack of relationship between fees and costs and demand levels. Kamp mentions that additional community-based courses may be expensive to operate - thus indicating an awareness of incremental costing. Hartline and Huddleston and Batty have emphasized that the fee structure is only one component of a total financial package in which aid availablity also needs to be included as part of an institution's market studies. Other writers note the absence of a cost-revenue nexus

as a differential factor distinguishing education from business, generally mentioning that student contributions only defray a proportion of the operating costs.

It will be interesting to see if in future, administrators faced with difficult decisions because of lack of funds, will allow the financial contribution factor to play an increasing part in their decisions. The argument that education is a 'not-for-profit' service fuction has been raised on this issue. However even from this point of view, an understanding of the actual costs involved in terms of resource utilization may enable more informed decisions to be made in what one writer has descibed as the 'sublime activity of higher education'.

3.2.6B Promotion

Promotion, advertising and public relations are activites that many people equate with marketing. The survey undertaken by Murphy and McGarrity found that this was the view of most admissions officers. However when placed in the context of a total marketing plan, promotion can be seen as a carefully structured complementary activity designed to reflect the institution's responses to the attitudes of the publics with which it wishes to develop relationships. A few examples of 'poor-taste' advertising and promotions have received wide condemnation. Druesne and Zavada reported that potential college students expressed a strong dislike of promotional

gimmicks and flippant humor in publications designed to inform and attract them to an institution. Nonetheless most institutions acknowledge that promotion, in one form or another, has always been an important part of their legitimate activities.

Despite this general interest in the promotion component of a marketing plan, there is little recent material directed to detailed discussion and analysis of various promotional techniques. A notable exception to this is the collection of resource materials edited by Carter and Garigan which concentrate on the practical aspects of catalogs, promotional films, mail surveys, etc. Murphy and McGarrity found in their study that many institutions (75%) regarded their activities as 'adequate' although some media were little used (Television 6%, Radio 16% and Newspapers 38%).

Cooper found that the formats used in college catalogs were not those preferred by student readers. Johnson and Chapman also found the language used was above the level of this audience. Two other interesting studies were undertaken by Fram(1) and Hise and Smith. Fram(1) identified that an educational institution image change took between eight and ten years. Thus suggesting that planning in the area of image selection and promotion was a long-term consideration with major consequences for institutional success or failure in the market.

An interesting experiment was undertaken by Hise and Smith, recognizing the importance of the college choice decision, they attempted to reduce 'cognitive dissonance' through the distribution of printed materials. In this experiment no significant differences were observed between students given the follow-up materials and those who were not. Weirick reports that special attention is given to this factor at Temple University (Pennsylvania). It is likely that further work will be done in this field. Expenditures to attract students will be partially wasted if they do not stay to complete full courses of study and perhaps consider higher-level or additional courses at the same institution. One consequence of increasing competition may be a relaxation of transfer restrictions. In addition to considering 'negative factors' causing attrition, administrators may initiate proactive promotion programs to students currently studying at their institutions. This accords with the view noted earlier that higher education is a series of both 'investment' and 'consumption' purchase decisions.

3.2.6C Delivery

One of the components of a total marketing plan which has shown steady development over a number of years is the delivery of educational services. The trend has been to augment the single-campus, regular semester, daytime, classroom instruction with a variety of learning experience opportunities. The

changed direction in American education towards more mature and part-time students in current employment has initiated some of these developments. So too has the over-supply situation emerging in the more traditional markets. More and more colleges and universities are moving towards the modes of operation of non-traditional institutions, although many administrators express reactive views based on arguments such as 'maintenance of academic standards' and a belief in the benefits of a 'campus experience'.

Time, place and mode of instruction are all areas where institutions of higher education have the potential to initiate changes, either in response to existing market needs or to enter new market segments. Long Island Learning Center (Los Angeles Community College District) and Stern report market research approaches, including cost-effectiveness evaluations, for extending educational outreach through technological advances in communications. Otto points out that 'flexible time scheduling' alone may be a substantial step towards attracting the generally older students seen as constituting new market opportunities by many institutions.

Most institutions have introduced new methods of delivery of teaching services to students, although in the sellers' market of the 1960's and early 1970's the rate of change and the amount of innovation often was not dramatic. In today's situation, differential modes of delivery provide a means of

increasing the range and areas of instruction to tap new markets and maintain old ones in cost-effective ways.

Administrative services are also a part of the 'educational package' delivered to students. In some cases, such as the use of computers, extended services have been possible at reduced costs. Some institutions have been slow to develop the delivery of administrative services to the off-main-campus, out-of-regular-working-hours market. This has created an inconsistent image when teaching functions are arranged for, and the promotional messages are directed towards attracting, students in these categories.

It is unfortunate that some institutions which have catered to 'non-traditional' students had standards which were lower than those of traditionally accredited colleges and universities. The notion of second-grade or academically suspect work has been unreasonably attached to the delivery methods, rather than the quality of the services being delivered. Partly as a response to demand and supply pressures and partly through successful experimentation by 'reputable' institutions more and more institutions are introducing new modes of delivery for teaching and administrative services and extending opportunities for higher education to individuals previously unable to participate.

3.2.7 Results

A general impression gained from the literature is that increasing numbers of institutions have developed more means of monitoring their performance in the educational market place. Wilson suggests that many serice firms in the business world are casual about 'continuous market feedback' and that data collection should be integrated and subsequent storage should be purposeful. In the field of higher education the work of NCHEMS in developing a range of research tools for colleges to obtain a range of data about the outcome of various institutional impacts on the community is in marked contrast to Wilson's remarks.

One aspect of the market studies in higher education as reported in the literature that is not favorable is that they appear to be once-only analyses. The assessment and review activity undertaken on an irregular basis may have some benefit in that it is more spontaneous and less regarded as an institutional ritual; however a planned orderly ongoing data collection process is more likely to have significant benefits for the institution in the long-run.

Another area which appears to have received little attention in the literature is a gathering of the perceptions of current students. Studies such as that by Quanty and Noeth and Hanson are based on the views of students five years after graduation. While these opinions are important, the attitudes of students five weeks or five months after commencing their studies may be a more relevant guide to market planning in the

immediate future. This idea can be related to the concept of 'cognitive dissonance' discussed earlier.

'Results' are sometimes unnecessarily narrowly defined in educational institutions. Data may be collected from within the institution on costs and enrollment patterns yet data on the environment, competitors, and general institutional images held by a community may not be measured and recorded. Some reports indicate that institutions are interested in assessing their results in more of their fields of activity. Tartaglia discusses research on former students who did not complete their courses. Sullivan and Litten also researched the reasons for non-acceptance by potential students. Measuring and obtaining results is often not quite as exciting a task as planning; it also can be quite a demanding and expensive function. Without adequate data on all results of their marketing plans, institutions limit their opportunities for self-appraisal and subsequent adaptive behavior. Both planning and control are necessary for achieving a successful marketing operation in a college or university.

3.2.8 Audit and Control

In some of the literature it is difficult to separate the functions of planning for the future and analyzing past results. This highlights the fact that market planning is an integrated process; however some of the literature does not emphasize that

the process is also an ongoing one. Many writers point to an evaluation of the effectiveness of activities in the recent past as part of the background for planning and do not stress that the assessment process itself needs to be planned.

One of the iterative steps in the formulation of goals and objectives should be to look ahead to assess whether and how performance on these criteria can be measured. Certainly if there is difficulty in measurement, it is likely that, at least, the short-term objectives have not been specified in sufficient detail.

The control function is a follow-through of the planning activities and leads into the next planning phase. It is thus necessary for an institution's administrators to know what type of data is to be collected, how often, by whom and to whom and by when it is to be reported. One common feature of the business world is performance reporting. That is the reporting of actual v/s planned figures and an analysis of the deviations. Adept managers are careful to direct this process towards improving both future planning and performance rather than attaching blame to individuals for off-standard results. There is very little educational literature that suggests that this is being done in the field of marketing educational services.

An exception to this general statement is Carleton College, Minnesota. Sullivan and Litten provide a very comprehensive

report including questionnaires, on the use of Kotler's 'systematic marketing audit'. Johnson(3) provides a simpler '10 point checklist for a self-audit of non-profit marketing readiness' which directs attention towards major areas needing research before effective planning can begin. Tartaglia outlines a 'marketing environment review audit' at Cuyahoga Community College, Ohio, and Portugal mentions that monitoring of communications is vital to ensure consistency of image.

There is a close relationship between Service Market Analysis and Planning and the Audit and Control function of the previous period; however this later aspect should not be regarded simply as one phase of the next period's planning. The importance of gaining answers to the question of "Why did these variations occur?" needs to be known before steps to either change future plans or performance can be properly initiated.

3.2.9 Research Data

From both its placement in the comprehensive marketing diagram and the frequency with which it is mentioned in the literature, it is evident that market research data is of central importance. Each of the other ten components in the plan rely for their effectiveness on the provision of adequate information.

Allen, Johnson(4) and Krachenberg are three writers who

deal with the subject of institutional research data for the marketing function. Johnson argues that a new orientation, towards the financial and enrollment challenges of the 1980's, is required for institutional researchers. Allen adds the comment that, for many colleges and universities this will require expansion and greater resource allocation for institutional research; but that this should be well repaid in terms of institutional viability. Krachenberg notes that without adequate research data, institutions will not be aware of changes in their market segments and that research can, and should, be both centralized and divisionalized, depending on the area being studied.

Because it is so closely allied with all aspects of comprehensive market planning, most writers acknowledge the necessity for adequate information for the sequential decisions of the continuous marketing process. A good marketing plan will provide answers to the following questions: What data is needed? By whom? When? How and where can the data be obtained? By whom? Who is to receive it? When and in what form? What resources will data gathering, processing and dissemination require? What controls exist to ensure the planning for the preparation and communication of data is followed?

Without proper planning it is unlikely that information will be available when needed. Without adequate information it is unlikely that the market planning process will be as

satisfactory and thus the future viability of the institution placed more at risk.

4. RECENT RESEARCH AND RESOURCES

4.1 College and University Marketing Plans

The following is a list of nine institutions reported in the literature as having implemented comprehensive marketing plans. These are cross-referenced by author to enable easy location in the annotated bibliography.

NAME OF INSTITUTION:

- AUTHOR

Bellarmine College (Kentucky)

- Petrik

Carleton College (Minnesota)

- Litten(2) and Litten and Sullivan

Clark College (Washington)

- El Sharei

Delaware County Community College (Pennsylvania)

- Spencer and Dock

Hartford Community College (Maryland)

- Hartford Community College

Massachusetts Community College (Massachusetts)

- Landry

Olivet College (Michigan)

- Sparks

Prince George's Community College (Maryland)

- Bickford

Prince George's Community College (Maryland)

- Leach

Temple University (Pennsylvania)

Weirick

4.2 Institution-Based Market Research

Listed alphabetically below are institutions reported as having undertaken market-based research studies without fully adopting an integrated marketing plan. The reports are summarized by the major area of research and authors are listed to permit easy reference to further material in the annotated bibliography.

NAME OF INSTITUTION:

- AUTHOR

- TYPE OF STUDY

Carnegie-Mellon University (Pennsylvania)

Chapman R.

Price factor analysis in college choice

City University of New York (New York)

Stern

Market research into telecourses

Cuyahoga Community College (Ohio)

Tartaglia

Market environment review audit

Eastfield College (Texas)

Armijo et al

Local impact study (NCHEMS)

Harper College (Illinois)

McMannis and Lucas

Mini-session attendance study

Johnson County Community College (Kansas)

Tatham

Enrollment trend projections

Johnson County Community College (Kansas)

Quanty

Graduate placement analysis

Kalamazoo Community College (Michigan)

Armijo et al

Local impact study (NCHEMS)

Kansas City Metropolitan Community Colleges (Missouri)

Keim(2)

Comprehensive market research project

Kishwaukee College (Illinois)

Wiseman

Student population program awareness

Leicester Junior College (Massachusetts)

Kamp

Role of local advisory committee

Metropolitan Community College (Minnesota)

Stecklein

Market research studies

Michigan State University (Michigan)

Naidu

Institution choice variable analysis

Mitchell College (New Jersey)

Thompson

Uncertainty in marketing information

Moraine Valley Community College (Illinois)

DeCosmo and Barrata

Research of 'underserved' groups

North Carolina Community College (North Carolina)

Cauley

College choice analysis

Pacific Lutheran University (Washington)

Trivett(3)

Multi-dimensional image scaling techniques

Pierce College - Los Angeles Community College

Landini

Demographic/Campus location study

Rio Salado Community College (Arizona)

Rio Salado Community College

Interim comprehensive planning report

Shippensberg State College (Pennsylvania)

Hise and Smith

Cognitive dissonance and withdrawal rates

St Louis Community College District (Missouri)

Hunter

Demographic study of potential students

The College of St Rose (New York)

Luciano

Evaluation of reactions to PR

University of Bridgeport (Connecticut)

Krauschaar

Economic impact study

Valencia Community College (Florida)

Armijo et al

Local impact study (NCHEMS)

4.3 Other Research Studies

A number of other studies related to marketing of higher education services are summarized below. Included are reported results which may be relevant to planning future college and university marketing activities.

AUTHOR:

SURVEY FIELD

TYPE

RESULTS

Alexander

1800 administrators at 600 colleges

Favorability towards marketing plans

90% in favor, 72% currently using them.

Boyer

830 public two-year colleges

Assessment of % of women in student population

11/14 course areas showed slight increases

Chandler

Parents and high-school seniors

Investigation of college choice decision

Parents place finance first,

students other factors

Cooper

423 college, university and high-school seniors

Format of college publications

Most colleges do not use preferred formats

Davidson

432 AA degree graduates

Post-degree education and work

54% took more education 44% took 4-year courses

Dezek

19 Southern Michigan Community Colleges

Survey on existence of marketing plans

None had a 'comprehensive' plan

Hartline

Loan applicants N.Y. Bank

Regression analysis

Educational loans not related to family financial position

Johnson and Chapman

206 high-school seniors

Assessment of student and catalog reading levels

Catalogs too high a level for this audience

Murphy and McGarrity

Admissions officers at 219 private institutions

Assessment of 'marketing' in their institutions

90% had limited concepts,

less than 3% had 'comprehensive' plans

Noeth and Hansen

4350 graduates - nationwide

Subsequent vocations and course satisfactions

Most were satisfied and worked in related fields

Parker

23400 students in 158 colleges

Vocational and baccalaureate bound 2-year courses

Vocational 58% and growing,

baccalaureate bound 42% and falling

Schley

50 employers and 965 women employees

Job-related community college courses

Both the education and work situations needed restructuring to allow full participation

Sussman

300 4-year college presidents

Perceptions of marketing

Most did not have a comprehensive marketing concept, 70% assessed themselves as adequate.

5. CONCLUSIONS

This paper has been addressed to two specific questions. Whether the adoption of a marketing orientation has been widely accepted by institutions of higher education? Secondly, whether it has proven beneficial to large numbers of colleges and universities? The answer to the first question appears to be 'no'. That is, most post-secondary institutions have an institution/product orientation and are unwilling to change their primary focus towards the wants of the publics with whom they have relationships. On the other hand there does seem to have been some shift towards greater emphasis on the importance of the student market for the institution's services.

The turnaround in the sellers' market situation of the 1960's and early 1970's has made many colleges and universities acutely aware that they have to pay more attention to activities that fall within the ambit of marketing. Generally however, most institutions may be described as moving in a piece-meal, unplanned, reactive and sometimes begrudging manner towards a greater marketing emphasis in their administrations. The second question of whether adoption of a marketing orientation has proven beneficial to a large number of colleges and universities is difficult to answer directly. This is due, in part, to a presumed bias in the reports that are written and

published. The impression gained from the literature is one of success and worthwhile results even in those institutions employing limited approaches. As a group, community colleges have been leaders in adopting a marketing orientation and their success and growth in the 1970's is widely acknowledged. In a few cases institutions have had disappointing results. However it appears that they undertook some activities that they equated with 'marketing' (for example, 'hard-sell' techniques and gimmicky promotions) without careful planning and recognition of the total marketing concept. Where colleges have rushed inadvisedly into these activities to save their declining market from increased competition, or to copy what looked like successful strategies of other institutions, the chances of satisfactory outcomes have been lower.

It is a general conclusion that more institutions will adopt marketing orientations, and with increasing expertise in this field, more colleges and universities will have 'comprehensive marketing plans'. The model developed in this paper does encompass all marketing activities mentioned in the literature, although its sequence and structure does differ from other writers. The iterative and integrated nature of the model was stressed, as was the fact that its purpose was to act as a framework for planning and putting into practice, a total marketing concept.

Many sections of the model deal with activities that may be

argued as extending beyond 'marketing'. Some of the opposition to a more marketing oriented outlook has come from those who had quite narrow definitions in mind. A few opponents argue that being a commercial concept 'marketing' is not fully applicable to higher education. These arguments tend to have been overwhelmed by events. More and more colleges and universities, sometimes pressured by current conditions, are successfully employing suitably modified marketing approaches. Ultimately the competition for the best students may be in large part decided by the level of marketing expertise of the institutions involved.

Certain areas in this paper have been highlighted as ones where future work, both in the practical situation and in research, can be undertaken. These include:

1. Refining institutional missions and developing unique identities.
2. Goal-setting for relations with more publics of an institution.
3. Creating more flexible and market responsive organization structures within institutions.
4. Extension of market oriented research activities, especially environmental impact studies.
5. More attention to the pricing, and costing, of educational services.
6. More sophisticated and cost-effective promotion techniques.

7. More attention to controlling the results of cognitive dissonance in the ongoing student college-choice decision process.

8. More critical attention to existing courses either by 'phase-outs' or stimulation of demand (for example, classical studies) and more careful planning for new course offerings.

9. More sophisticated, extensive and complementary delivery of administrative and teaching services.

10. More emphasis on the control function in the planning and control loop of marketing management.

Marketing will play an increasing role in the administration of colleges and universities in the U.S.A. In the 1980's. A few writers have stressed that this will require that more senior status be given to the marketing function than to view it as one activity of the admissions office. In future, more institutions will have vice-presidents' offices responsible for developing and co ordinating an integrated marketing orientation for their college or university. However, successful implementation will rely on increased understanding and acceptance throughout the organization. This will be an educative process. Alexander has suggested to facilitate this change, graduate educational administration courses should include a course on marketing. Some in-service programs and seminars are conducted for present-day administrators, however it will probably be some considerable time before an

appreciation of marketing and skills in its practical application are widespread in higher education.

BIBLIOGRAPHY

ALEXANDER, Fred J.,

Administrative Opinions Concerning Utilization of Marketing Strategies in Management of Higher Education Institutions in the United States.

Ed.D. Dissertation, Memphis State University, 1978.

Survey of administrators from 600 colleges and universities found 90% of 1022 respondents favored utilization of marketing techniques and 72% were currently using them. These results were not related to institution type, size or enrollment trends. Recommendations include 'that graduate educators be encouraged to include extensive information on college/university marketing techniques in courses relating to higher education'.

ALLEN, Bruce H.,

The Role of Institutional Research in the College and University Marketing Process.

ERIC Document, ED 161391, 1978.

Argues that institutional research activities will have to be changed and expanded to obtain relevant information for decision-making to enable institutions to retain support and resources necessary for survival.

ARMENIO, Joseph A.,

'Back to the Agora: Marketing Foreign Admissions',

Journal of the National Association of College Admissions Counselors, 22: 30-4.

Points out that with appropriate marketing strategies, international student enrollments can offset declining domestic enrollments.

ARMIJO, J. Frank, MICEK, Sidney S. And COOPER, Edward M.,

Conducting Community Impact Studies: A Handbook for Community Colleges.

Boulder, Colorado: National Center for Higher Education Management Systems, 1978.

A detailed and comprehensive approach to classifying: 1. 'institutional impacts' 2.'audiences' and 3. 'outcomes'. Illustrates three parallel impact studies undertaken in 1977 (Kalamazoo Valley C.C. - Michigan, Eastfield College - Texas and Valencia C.C. - Florida) to develop a standardized format for such studies.
(Documents from this study are included in Appendix A.)

BARTON, D. W.,

Marketing Higher Education.

San Francisco: Jossey-Bass, 1978.

Collection of six papers covering: the role of academic programs, identifying an expanded student pool, attracting students, financial aid, admissions administration and a case history of Temple University. The conclusion (by Barton and David R. Treadwell) identifies eight major questions related to a marketing plan. Is the chief officer marketing oriented? Is marketing effort co ordinated? What research base is there? Which institutional strategy

to use? Which marketing techniques? Role of communications? What monitoring system? What importance is given to retention?

BERRY, Leonard L. And ALLEN, Bruce H.,

'Marketings Crucial Role for Institutions of Higher Education',

Atlanta Economic Review, July-Aug., 1977: 24-31.

With stagnant enrollments and inflation many colleges face financial difficulties. Presents a diagram of 18 'publics' of higher education (using the term 'publics as defined by Kotler(1)). Marketing effectiveness involves 1) Adapting the organizational structire for more effective marketing performance. 2) Identifying and assigning priorities to the institution's publics. 3) Analyzing exchange relations between the institution and its publics. 4) Designing and implementing marketing mixes that provide the right product (product strategy) at the right place and time (distribution strategy) and at the right price (pricing strategy) to the right public or public segment (market segmentation) and to effectively communicate this offering to them (promotion strategy), so that mutually satisfying exchange relationships will be achieved.

BICKFORD, Robert I.,

'The President as Marketer',

Community and Junior College Journal, 48: 4:14-6.

Describes successful introduction of a four-stage marketing plan* including 'service', 'promotion','delivery' and 'evaluation' at Prince Georges C.C., Largo, Maryland.
(* As described by Leach, see below.)

BOYER, Elizabeth,

Women — Are the Technical-Occupational Programs Attracting

Them?

ERIC Document, ED 085065, 1973.

Questionnaire to 830 public 2-year colleges found these enrollments increasing only slightly. Lists five techniques found in colleges with largest increases: more female faculty, female pronouns and pictures in publicity, women recruiters, and seminars for high-school counselors.

BROWN, John A.,

'The Role of Academic Programs in Institutional Marketing',

in, Marketing Higher Education, D. W. Barton, Ed.,

San Francisco: Jossey-Bass, 1978.

Argues that institutional research on reasons for students selecting an institution is neglected. Notes that transferees often go to very different types of institutions than their former college or university.

CAMPBELL, Clifford C.,

'The Administration of Admissions',

in, Marketing Higher Education, D. W. Barton, Ed.,

San Francisco: Jossey-Bass, 1978.

Co ordinated long-range planning is required including budgeting. Staff selection and training is crucial. Implementation of the plan must be monitored. A person-to-person approach is vitally important.

CARTER, Virginia L. And GARIGAN, Catherine S., Eds.,

CASE: A Marketing Approach to Student Recruitment - The Best of CASE Currents.

Washington, D.C.: Council for Advancement and Support of Education, 1979.

A collection of 46 papers, many detailing practical approaches to catalogs, promotional films, mail surveys, etc.

CAULEY, Mary M.,

Marketing Community College / Technical Institute Education with Emphasis on Student Recruitment.

Ed.D. Dissertation, North Carolina State University, 1979.

In this study of institutional selection by students it was found that 'less informed' sources such as parents, other relatives and friends (not students) were more influential than 'more informed' sources such as high-school counselors and present students.

CHANDLER, E. Wayne,

An Analysis of Consumer Decision-Making in the College Selection Process.

DBA Dissertation, Arizona State University, 1979.

A study of the college market of high-school seniors in Kansas City, found that the family was the key decision-making unit. Parents having decision-making dominance in the area of finance. Public college bound students had differing perceptions of various information sources to private college bound students. Two key variables were: 1. The quality of faculty and the academic program, 2. Total institutional climate including academic, social and 'campus atmosphere' dimensions.

CHAPMAN, Randall G.,

'Pricing Policy and the College Choice Process',

Research in Education, 10: 37-57, 1979.

(See also ERIC Document ED 161385 for a similar paper)

Presents results from a study at Carnegie-Mellon University, Pennsylvania, on decision-making behavior of high-school seniors. Discusses marketing implications of results that perceived college 'quality' and availablity of financial aid are key factors. In developing a stochastic price utility model, 'price' included tuition and fees, room and board, application fees and financial aid components.

COLLEGE ENTRANCE EXAMINATION BOARD,

'350 Ways Colleges are Serving Adult Learners',

in, Future Directions for a Learning Society.

New York: College Entrance Examination Board, 1979.

Description of new practices concentrating on the area of adult education, at fifty colleges. Sections include: assessing needs, program development, faculty involvement, media and advertising, admissions and registrations, support and aid services, additional sources of funds, strengthening adult learning, and evaluations.

COFFEY, William J. And NORDSTROM, Louis W.,

Evaluation of College Management Courses.

Masters Thesis, Naval Post-Graduate School, Monterey, Calif., 1973

Analysis of responses from large corporations (as potential employers) on management course content.

COMFORT, Robert W.,

'A New Operating Milieu: The Buyer's Market',

Lifelong Learning : The Adult Years, 1: 12-3, 27.

Suggests that despite the growth in older student market, the total market has stabilized and there is increased competitive pressure between colleges both at the 2 and 4-year levels. Education is no longer an oligopolistic market. Institutions must adopt a consumer orientation to attract and retain students. Acknowledgement of market product preferences is vital. 'Quality' concept applies to support services as well as teaching. 'Assortment of Products' including self-designed majors, independent and correspondence studies. 'Location" including multi-campus complexes with adequate services. 'Times' e.g. Sundays. Points out that educational institutions will need to be managerially efficient to survive.

COOPER, Edward M.,

Presenting Written Information in Communicating with a College Market.

Ph.D. Dissertation, University of Colorado at Boulder, 1979.

Survey using NCHEMS 'Better Information Data Base' with 423 college/university/high-school students found that the formats commonly used in college publications were not the ones preferred for reader meaningfulness. Suggests this analysis is important for targeting information to specific population segments.

COPPOCK, G. Stephen,

Student Recruitment for the Public, Two-Year College: A Mandatory Aspect of Institutional Viability.

ERIC Document, ED 165852.

Report of a successful and intensive campaign emphasizing selling and strong promotion to attract mainly high-school seniors to a two-year college. Although suggesting responsiveness to changed client demands, the emphasis is on marketing existing services.

DAVIDSON, Mildred,

Career Graduates: A Profile of Job Experience and Further Study of Students with AAS Degrees.

ERIC Document, ED 028295, 1968.

Follow-up study indicating that 54% of graduates went on to four-year colleges.

DE COSMO, Richard and BARATTA, Mary K.,

Using Community-Based Marketing Research to Increase Enrollments.

ERIC Document, ED 170009, 1979.

Describes a successful marketing approach at Moraine Valley C.C., Ill., to detect under-served community groups through market research and to develop appropriate marketing strategies.

DEZEK, John G.,

Marketing Strategies Utilized by Community College Continuing Education Divisions.

Ed.D. Dissertation, Western Michigan University, 1980.

Survey of 19 community colleges in southern Michigan.

Colleges were rated on five criteria suggested by Kotler's works: 1. Customer oriented philosophy. 2. Integrated marketing organization. 3. Adequate marketing information. 4. Strategic orientation. 5. Operational efficiency. The majority of colleges were 'adequate' but only six were rated as 'sophisticated and effective' in only two categories. Use of computers in data organization and needs assessment was noted. The author suggests further research could be undertaken on cost-effectiveness of research and promotion at colleges.

DIVISION OF EDUCATIONAL PLANNING AND DEVELOPMENT,

A Plan for Development of an Educational Telephone Network (ETN) to Extend Access to Educational Programs.

Los Angeles Community College District, Calif., 1973.

Advocates a four-stage 'marketing approach' including the aspect of 'delivery'. Includes an evaluation of an ETN course and a cost-effectiveness study.

DOERMANN, Humphrey,

'The Future Market for College Education'

in, A Role for Marketing in College Admissions,

Princeton, N.J.: College Entrance Examination Board, 1979.

A detailed study analyzing an expected 22% decline in high-school graduates to 1990. Tables for 1964 through 1984 of verbal aptitudes and family income, suggest that even with diversification, colleges will probably need additional State and Federal funding.

DRUESNE, B. And ZAVADA, M.,

'Reach Students Effectively',

CASE Currents, May 1978, 17-19.

Review of student reactions to materials distributed through 700 colleges using the Student Search Service, of the College Entrance Examination Board. Postage rates, editorial and graphic quality and effective personalized communication were important although perceived status of the institution was an over-riding factor. Students expressed strong dislike of promotional gimmicks and flippant humor in college promotional literature.

ELDRIDGE, Donald A.,

The Rapid Growth of Community Colleges and their Accessibility in Rural Areas.

Paper, National Outlook Conference on Rural Youth, Washington, D.C., 1967.

Suggests that rural youth are an over-looked source of potential students. Community colleges should structure courses more to meet their specific needs.

EL SHAREI, Patricia P.,

Implementing a Marketing Program in the Community College,

ERIC Document, ED 164075, 1979.

Survey of administrators and staff at ten southern Californian community colleges found no generally accepted marketing plans. Public Information Officers usually had responsibility for promotional literature.

FISCHER, Guerin A.,

Marketing a Community College: A Conceptual Framework.

ERIC Document, ED 156280, 1978.

Stresses the need to include retention factor in assessing the success of marketing efforts. Emphasis on dissemination of accurate information and adequate advisement processes.

FISKE, Edward B.,

'The Marketing of Colleges',

Atlantic, 244: 93-8.

Discussion of internal and professional 'promoters' and consultants and promotion techniques employed to recruit students e.g. Scholarships, loans, rebates for students who enroll others, adoption of advertising campaigns, purchase of mailing lists, extensive market research. Lists techniques employed in a number of colleges. Concludes some colleges may debase higher education and that perhaps some should close.

FRAM, Eugene H. (1),

'Marketing Higher Education',

in, The Future in the Making, D.W. Vermilye, Ed.,

San Francisco: Jossey-Bass, 1973.

Argues for a marketing approach with careful assessment and reasonable research data on the controllable factors of curriculum, location, communication and fees. Marketing should be to (retain) current students as well as potential students, alumni and the local area. An image change takes 8 to 10 years. Notes the rigidity of pricing across subject areas and years of courses; lack of studies on readership of college literature; growing number of channels of educational services; and the general need for formal marketing plans which recognize market segments.

FRAM, Eugene H. (2),

The Marketing Role of the College or University President.

ERIC Document, ED 174124, 1979.

Stresses that the president must be marketing oriented and relate his institution to the realities of the client market place and the social/political/economic environment. Many institutions a) fail to understand uses and limitations of marketing, or b) regard isolated activities as a marketing plan. Identifies nine elements of marketing activities: admissions, PR and publications, student retention, counseling, faculty divisions, alumni relations, placement, institutional research and development.

GAITHER, Gerald H.,

'Some Tools and Techniques of Market Research for Students',

New Directions for Institutional Research, 21: 31-67.

Argues that in order to combat declining student enrollments, institutions will have to become more professional in their research and marketing. Such action will have significant other benefits within those institutions willing to take this approach. Includes computer population mapping survey techniques (CSU - Northridge Questionnaire). Institutional positioning assessment (Yale - Multi-dimensional Scaling).

GLEAZER, Edmund J.,

'Mission Revisited',

Community and Junior College Journal, 49: 2-3.

Presents the view that colleges must be assertive in defining missions. They must accept responsibility for educating those who are 'place bound', 'time bound', 'money bound' and constrained by other forces

in our society. The marketing target is to narrow the gap between the number of adult learners and those who are not. Colleges must communicate this mission to a community concerned about tax levels. The college Board is a vital link in conveying this necessarily complex and changing message.

GORMAN, W. P.,

'Marketing Approaches for Promoting Student Enrollment in Higher Education Institutions',

College and University, 49: 241-50.

Argues that the current educational 'downslope' is a common feature in business. Sound marketing could expand the total market and benefit all parties. 'Approach' is important, there is a need for well delineated target markets, recognition of non-student participants and the sources of created images. 'Strategies' include product differentation and market segmentation. Defines: 'Quality Product Strategy', 'Adjustment Strategy' 'Image Strategy'. 'Tactics' include advertising, sampling, special emphasis, and immediate (warm) responses.

HARTFORD COMMUNITY COLLEGE,

Marketing Plan 1978.

Hartford Community College, Bel Air, Md., 1978.

A detailed report of four major components of HCC's marketing plan :
1. Service - evaluation of time and location alternatives for both service and teaching functions.
2. Promotion - recognition of both formal and informal communication media.
3. Delivery - course requirements, program assessment, vocational and counselling services.
4. Data Collection evaluation and reaction.

HARTLINE, Jessie C.,

A Study of the Capital Market for Student Debt Financing of Higher Education.

Ph.D. Dissertation, Rutgers - The State University, 1968.

A study of borrowing needs of students and their families. Discusses an 'Educational Opportunity Bank'. Makes no analysis of the role of educational institutions in the provision of finance to students.

HAYDEN, Mary, and others,

Choice or Chance: Planning for Independent College Marketing and Retention.

ERIC Document, ED 135289, 1976.

Results of marketing efforts after 1972 in six institutions having to cope with declining enrollments in the area of the Northwest Area Foundation.

HISE, Richard T. And SMITH Ephraim P.,

'Using Cognitive Dissonance Theory to Reduce the Back-Out Rate in School of Business Applications',

Decision Sciences, 1977: 300-10.

Discusses nine factors associated with Festinger's concept of cognitive dissonance: (importance of decision, number of alternatives, existence of positive and negative factors, similar alternatives, lack of information, lack of experience) and the importance of this concept in tests conducted in marketing consumer durables. Half of 286 successful applicants at Shippensburg State College (Pennsylvania) received welcoming follow-up letters and newsletters; however no significant difference in

final attendance rates was observed.

HODGKINSON, Harold L.,

'Truth and Consequences on Enrollment',

AGB Reports, 20: 8-12.

Examines four factors influencing enrollments: 1. Demographic patterns (including migration), 2. High-school curricula, 3. Industry sponsorship, 4. Colleges without campuses.
Indicates three possible responses: 1. More specific 'missions', 2. Improved counselling, 3. More consortia.

HOWARD, William R.,

'Community Transactions and the Marketing Process',

New Directions for Institutional Research, 6: 69-86.

Emphasizes the effective utilization of community agents. Argues that community-based marketing improves colleges outreach capabilities and encourages developmental processes within the community itself.

HUDDLESTON, Thomas and BATTY, Burt F.,

'Marketing Financial Aid',

in, Marketing Higher Education, D. W. Barton, Ed.,

San Francisco: Jossey-Bass, 1978.

Reports growth in the area of financial aid and its relationship to enrollments and the importance of (total) product pricing, the need to improve communications and achieve the right mix of aid (grants, scholarships, loans and employment). Results of the financial aid package need be constantly

reviewed in the total marketing approach.

HUGSTAD, Paul S.,

'The Marketing Concept in Higher Education: A Caveat',

Liberal Education, 61: 504-12.

Educational institutions should have long-term social objectives. Much of the current marketing thrust is a panic to arrest falling FTE's. A trend to short-term image differentation and at the same time movement towards homogeneity reflects marketing for commercial consumer products. Promotion of the 'persuasion' type rather than 'information dissemination' may not be in students' best interests. Similarly, lowering academic standards to meet consumer pressure may be socially irresponsible. Argues that perhaps some institutions should shrink or close.

HUNTER, Walter E.,

Post-Secondary Youth and Adult Learning and Educational Marketing and Delivery Systems.

Trustees' Symposium on Post-Secondary Education, St.Louis, Mo., January 1975.

Collection of papers emphasizing marketing of non-traditional education and results of the 'St.Louis Project' - a study of the needs of would-be learners in the St.Louis Community College District including: residence, sex, race, age, and present educational levels and present services.

IRELAND, Richard C.,

Marketing for Nonprofit Organizations.

Aspen, Col.: 1976.

JOHNSON, Dennis L. (1).

'Ethics : Managing Change in Admissions',

Journal of the National Association of College Admissions Counselors, 17: 3: 3-16.

Argues that changes in admissions policies are necessary and that creative adaptation to new market needs is essential especially for smaller and private colleges. Private colleges failed to complement the growth of the community colleges. The President and the admissions officer will need to be increasingly professional. Some faculty and staff may need to be retrenched to enable institutional survival. Potential students are more informed and discerning. Private colleges will need to become more market oriented, particularly by relating their services to students' future employment.

JOHNSON, Dennis L. (2).

'Marketing the "Un-Cola" College',

Community and Junior College Journal, 48: 14-7.

Uses a soft-drink analogy to argue that community colleges were successfully marketed in the 20 years to 1976, however since that time there has been a significant decline in the student market. Points out the important difference between 'marketing' and 'selling'. Suggests a 'Total Marketing Concept' can help to reach the seven out of ten persons maintaining families who do not have a college education. A 'TMC' a) requires a full commitment from all staff and faculty, b) needs a specialist staff person, and c) using a segmented marketing approach can assist in developing faculty programs. Marketing is based on identifying markets and how to reach them. Marketing will not solve all administrative problems but can assist colleges to attain their objectives and meet

their missions.

JOHNSON, Dennis L. (3),

'Managing Nonprofit Marketing',

New Directions for Community Colleges, 7: 55-65.

Suggests that since their inception the community colleges have been innovative and 'market centered'. To be effective colleges need wide involvement and social commitment and a strong working 'task force'. Includes a useful check-list on attitudes of various 'publics' of an educational institution and a ten point check-list for a 'self-audit for non-profit marketing readiness'.

JOHNSON, Dennis L. (4),

'The Researcher and Non-Profit Marketing : Is Anyone Listening?',

New Directions for Institutional Research, 6: 1: 1-9.

Points out that applied research is necessary for non-profit marketing at institutions of higher education. Suggests that institutional researchers have an important role to play if institutions are to meet fiscal and enrollment challenges of the 1980's. Poses six 'tough pragmatic' questions: 1) What business are we in? 2) Why do students attend our institutions? 3) Why do students continue at our institutions and why do they graduate? 4) Why do students leave? 5) Are we ignoring possible new markets? 6) Have we included all members of the college community in our marketing concerns and efforts?

JOHNSON, Russell H. And CHAPMAN, David W.,

An Assessment of College Recruitment Literature : Does the High

School Senior Understand It?

ERIC Document, ED 174079, 1979.

Using "College Terminology Quiz" reading levels of 206 high-school seniors were assessed. Difficulty levels of College catalogs were rated as 'difficult' to 'very difficult' and were considered appropriate to advanced college students or graduates; that is, well above the level of a major intended audience. It was also noted that most catalogs contained 'special vocabulary' words likely to be unfamiliar to high-school seniors.

KAMP,Gene A.,

'Private Colleges Look Ahead',

Community and Junior College Journal, 44: 10-1.

Argues that private colleges will have to turn to adult students and flexible scheduling. Explains the role of local citizens advisory council at Leicester Junior College, Mass., increasing the college's involvement in a range of activities in the local community. Mentions the problems of expensive courses, higher standards of adult learners and effects on the 'traditional' student body.

KEIM, William A. (1),

'Planning PR for a Community - Based Program',

New Directions for Community Colleges, 5: 4: 19-25.

Discusses the relationship between knowledge of marketing techniques and understanding of a community's social, economic, political, and geographic aspects. Gives emphasis to reaching disadvantaged groups through community agencies and specialized programs.

KEIM, William A. (2),

A Status Report from the Task Force on Marketing Research.

ERIC Document, ED 156251, 1978.

Reports results from a comprehensive market research project for Kansas City Metropolitan Community Colleges, Missouri, involving district demography projected to 2025, including sex, per capita income, employment patterns and educational characteristics. Identification of marketing objectives and surveys of area employers, educators and staff.

Keim, William A. (3)

'Applying Good Sense to Marketing',

Community and Junior College Journal, 50: 3: 10-3.

Argues that community colleges are already strong in marketing and display awareness of adaptive change. Identifies two sources of enrollments: 1) retaining current students and 2) two groups of non-students a) potential students with no educational interest who need special encouragement, b) work-force members with lifelong learning needs and interests. Warns of the dangers of a simplistic 'headcount' approach, and of a lack of willingness of faculty to meet new educational modes as required by markets.

KINGSLEY, G. Gordon and BELLEZZA, Francis S.,

'A Survey of the Occupational Interests of Junior College Students',

The General College Studies, 4: 1-68.

Survey of 421 current students to assess career interests and future potential of course offerings.

KOHN, M.G., MANSKI, C.F. And MUNDEL, D.S.,

'An Empirical Investigation of Factors which Influence College-Going Behavior',

Annals of Economic and Social Measurement, 5: 391-419.

The authors developed and tested a predictive utility model of college-going behavior. Three sequential decisions were studied: 1) whether to reside or commute, 2) which was the 'best' college, and 3) whether or not to attend. Variables examined included: Type of College (6), Income Levels (3), Costs involved (4), Academic Quality (4), Quality of Life (2), Father's education, Mother's education, Sex.

KOTLER, Philip (1),

Marketing for Non-Profit Organizations.

Englewood Cliffs, N.J.: Prentice-Hall, 1975.

This comprehensive text is the most commonly cited reference in the relevant literature. (See especially Chapter 18, Co author: Bernard Dubois, 'Educational Services Marketing'). Argues that higher education is predominantly product-oriented. Identifies insufficient funds, lagging innovations and unmotivated students as major problems which reflect needs for changed market strategies.

KOTLER, Philip (2),

Marketing Management : Analysis Planning and Control, 3rd edition, Englewood Cliffs, N.J.: Prentice-Hall, 1976.

KOTLER, Philip (3),

'Applying Marketing Theory to College Admissions',
in, A Role for Marketing in College Admissions,

Princeton, N.J.: College Entrance Examination Board, 1976.

KOTLER, Philip (4),

'Strategies for Introducing Marketing into Non-Profit Organizations',

Journal of Marketing, 43: 37-44.

Stresses increased growth of marketing in not-for-profit organizations. Describes 'Market Analysis', 'Resource Analysis' and 'Mission Analysis' for colleges and univerities. Also lists a number of poor promotional techniques used by colleges pointing out that they may attract the wrong type of students and may delay 'product improvement'. Points out that all organizations do some marketing. Suggests the appointment of a marketing committee, an institutional audit and the appointment of marketing staff and/or consultants.

KRACHENBERG, A. R.,

'Bringing the Concept of Marketing to Higher Education',

Journal of Higher Education, 43; 369-80.

Points out that institutions need research data to be aware of changes in their market segments and general societal values for effective long-term planning. Research may be both centralized and departmentalized. Institutions need not bow to all pressures but provide responsible leadership with greater knowledge of changed environments. A wide number of markets segments are available, selection must be made after consideration of goals and objectives and society's needs and wants. Good market planning and good institutional planning are inseparable. Three major marketing tools: communication, distribution and

pricing. Pricing in particular needs further research, notes the lack of relationship to costs and demand. All relevant factors should be considered in developing a market plan which encourages differentiation in markets and marketing approaches and distinctiveness in offerings of colleges and universities.

KRAUSHAAR, John L.,

The College Market in an Urban Area.

Ph.D. Dissertation, New York University, 1963.

An economic study of the impact of an urban university in the Bridgeport, Conn. Region. It was found that the university constituted a 'basic' and growing industry, creating demand through students coming from outside the region and by the university being a significant employer of local labor.

LANDINI, Albert L.,

Population Characteristics of Potential Satellite Campus Students.

ERIC Document, ED 103047, 1975.

Demographic study to determine potential student characteristics of population to identify site for Pierce College, Los Angeles Community College District.

LANDRY, Norman,

Need Assessment for Curriculum Development in the Massachusetts Community College.

ERIC Document, ED 168660, 1979.

Describes an eight step marketing approach to curriculum modification: 1) Defining the college mission and service area, 2) Searching for ideas, 3) Evaluating the ideas, 4) Developing the concept, 5) Testing the concept, 6) Allocating resources, 7) Estimating program demand, 8) Evaluating the program.

LARKIN, Paul G.,

'Market Research Methods for Improving College Responsiveness',

New Directions for Institutional Research, 6: 11-30.

Description of elements of a good marketing plan. Distinguishes between a 'marketing approach' and a 'sales approach'. Gives specific attention to the marketing processes for new programs. Includes 1) Planning information flows. 2) Data analysis. 3) Market positioning. 4) Student recruitment outreach. 5) Advertising and publicity. 6) Communication with prospective students. 7) Delivery to maximize retention. 8) The role of market research especially demographic and employment studies.

LEACH, Ernest R.,

'Implementing the Marketing Process',

Community and Junior College Journal, 48: 4: 20-4.

(See also ERIC Documents ED 146958 and 156242 for similar papers on marketing at PGCC)

Discusses four-stage 'marketing process' used at Prince George's Community College, Largo, Md., which departed from a 'product' orientation.
1) Service stage - identification of market segments and need for services, 2) Promotion stage - distinction between 'hard sell' and 'informed choice information dissemination', 3) Delivery stage - modes, locations etc. And consideration of attrition rates, 4) Evaluation stage - including distinguishing between 'in term' and 'between term' attrition as an

evaluation technique.
Contains a useful table of 'Marketing Strategies' (appended).

LEISTER, Douglas V. And MacLACHLAN, Douglas L.,

'Assessing the Community College Transfer Market - A MetaMarketing Application',

Journal of Higher Education, 47: 661-80.

Presents a strategic assessment method for potential student groups for a four-year college with emphasis on the regional community college transfer market.

LINNEY, Thomas,

'Interstate Migration of College Students',

AAHE - ERIC, Higher Education Research Currents, Dec., 1979.

Discusses trend to home-state attendance due to rising out-of-state fees and expanded state financial programs. Points to possible reciprocal tuition schemes and student exchange schemes to meet diversity of educational needs in a region and offset the increasing homogeneity of institutions.

LITTEN, Larry H. (1),

'Marketing Higher Education: Benefits and Risks for the American Academic System',

Journal of Higher Education, 51: 40-59.

Discussion of gradual acceptance of marketing management in higher education circles. Questions the direct applicability of business marketing to academia. Argues that college selection is a

consumption and investment decision, price is not the sole entry criterion, the student is also a quasi-product, price does not relate to cost, risks associated with over-exploitation and that excess 'consumerism' may destroy the intellectual tradition (classics, languages, philosophy) through following short-term fads. Suggests students and parents may react negatively to 'strong promotion'. Concludes marketing principle may be useful in higher education after suitable modification.

LITTEN, Larry H. (2),

Market Structure and Institutional Position Analysis of Regional Market Segments in Private College Recruiting.

ERIC Document, ED 154764, 1978.

Description of Carleton College, Minn., analytical techniques as part of a comprehensive market research program. (Including interregional comparisons, cross-tabulations, multidimensional scaling and regression analysis)
(See also Sullivan and Litten for related article)

LITTEN, Larry H. (3),

'Market Structure and Institutional Position in Geographic Market Segments',

Research in Higher Education, 11: 59-83.

Detailed research analysis on position of Carleton College, Minn., in regional market segments. Uses multidimensional scaling analysis of market structure. Analyzes attributes of other schools to which potential Carleton students may apply. Provides a graphic relative ratings technique for 16 criteria and a recruitment-yield analysis. Contains a regression analysis on these last two factors.

LONG ISLAND LEARNING CENTER,

Personalizing Instruction in Business, Economics and Related Subjects.

Saratoga, N.Y.: Empire State College, State University of New York, 1976.

Description of modifications in courses, assessments and credits by introduction of 'personal contracts' to suit an individual student's background, interests, needs and abilities.

LUCAS, John A.,

'Conclusions and Further Readings',

New Directions for Institutional Research, 21: 87-91.

Outlines the components of a complete marketing plan. Gives particular emphasis to curriculum evaluation, retention programs and assessment of the marketing strategies followed. Includes an extensive bibliography.

LUCIANO, Ann C.,

College Preference Survey : A Research Component in Marketing Higher Education.

ERIC Document, ED 168400, 1978.

Reports results of marketing survey conducted by The College of Saint Rose, Albany, N.Y., with high-school seniors and college staff. Results suggested re evaluation of the college's PR program, campus 'atmosphere', career counseling and strengthening of job placement services to meet student expectations.

MAWBY, Russell G.,

'The Greatest Opportunity',

AGB Reports, 19: 19-24.

Argues that today's colleges cannot be youth centered. Emphasises - 'institutionalizing' continuing education, proble- oriented programs, identifying target audiences and using new technology.

McMANNIS, M. Scott and LUCAS, John A.,

Evaluation of 1977 Winterim.

ERIC Document, ED 145877, 1977.

Survey results from five questionnaires on innovative two-week session at Harper College, Palantine, Ill. Results indicated that very few, new or different groups of students attended and the innovation attracted mainly young single students. Includes suggestions for expanded marketing of this teaching period.

MILLET, John D.,

Allocation Decisions in Higher Education.

Washington, D.C.: Academy for Educational Development, Inc.

Examines choice between colleges as bodies 'politic' receiving taxation and philanthropic funds and redistributing these according to power structures. Coverage includes: program budgeting and planning, college marketing price mechanisms and expenditure-income decision-making.

MONFETTE, Ronald J.,

Marketing Ourself.

ERIC Document, ED 113658, 1975.

Discusses the important role of the placement officer in a college and the ramifications of this activity on the successful creation of a marketable image.

MOON, Rexford G.,

'159 Million Prospects',

AGB Reports, 20: 20-3.

Points out that adult learners are now the majority of all learners although the college and university share is less than 5%. Many institutions still regard service to adults as an adjunct function. Institutions have been slow to accept off-campus activities, new assessment techniques, give appropriate financial aid and promote national policies to foster adult education. Recognition of this change could be traumatic for institutions and requires further social and demographic analyses of the new market of lifelong learning.

MUDIE, Herbert C.,

'Identifying and Expanding the Desirable Student Pool',

in, Marketing Higher Education, D. W. Barton, Ed.,

San Francisco: Jossey-Bass, 1978.

Emphasizes a market research approach after defining academic and nonacademic characteristics. Analysis of 'no show' students and evaluation of direct mail, publications, alumni as recruiters, high-school counselors and teachers, campus visitors, older students and employees is discussed.

MURPHY, Patrick E. And McGARRITY, Richard A.,

'Marketing Universities : A Survey of Student Recruitment

Activities',

College and University, 53: 249-61.

Study of responses from admissions officers of 219 private college and universities found that 90% believed marketing to be synonymous with promotion. Less than 3% had a comprehensive marketing concept. Gives break-up of average student recruitment expenditures (54% went to personal recruiting in high-schools) and an analysis of media and activities not used (TV 94%, Radio 84%, Newspapers 62% etc.) Provides an analysis of 10 Criteria believed to be important for student selection, 2) Criteria for selection of high-schools for promotion, and 3) institutional 'distinguishing characteristics'. 75% of respondents thought that their activities were 'adequate'. Recommends: 1) Adopting a 'marketing orientation', 2) Appointment of a senior official as "Coordinator of Marketing".

NAIDU, Gurrumkonda M.,

Systems Approach to Marketing Aspects of Higher Education.

Ph.D. Dissertation, Michigan State University, 1969.

In a study at Michigan State University it was found that in the selection of an institution by graduate students, financial aid was the single most important variable. For higher level courses faculty reputation was the next most important factor while for lower levels it was institutional location.

NORTH, Richard J. And HANSON, Gary R.,

A Five-Year Follow-Up of Students Enrolled in Post-Secondary Vocational - Technical - Transfer Programs.

Iowa City, Iowa: American Colleges Testing Career Planning Program, 1975.

Follow-up study which found that over 60% of 4350 graduates from eight college programs were satified with their courses and were employed in fields related to their studies five years after graduation.

NORRIS, James S.,

'The Selling of the Community College',

Community and Junior College Journal, 155: 12-5.

Despite open admissions policies and educational need in the community, educational capacity is underutilized. Argues that a history of successful selling and promotion exists and we should recognize that despite our feeling that education is itself worthwhile - it is not exempt from the laws of the marketplace - the fragmented and complex educational product must be sold.

OTTO, George,

With Declining Numbers of High School Graduates, Where Do We Find Enough Students for our Colleges in the 1980's?

ERIC Document, ED 181947, 1979.

Presents arguments that for institutional survival, community colleges must respond to the needs of non-traditional students; emphasizing flexible class scheduling to meet specific occupational needs, the needs of older citizens for job retraining or skill improvement, and recreational needs. Suggests that significant promotion will be required to reach this new market.

PARKER, Garland C.,

Career Education and Transfer Program Enrollments in 2-Year Colleges,

(ACT Special Reports 11 and 15)

Iowa City, Iowa: American Colleges Testing Program, 1974-75.

Source document for statistical data on 234,000 students in eight program areas in 158 colleges. Reported that 58% chose career type programs, 42% baccalaureate-bound programs.

PERNAL, Michael,

'Has Student Consumerism Gone Too Far?',

College Board Review, 104: 2-5.

Argues that regarding students as consumers may not be appropriate and that over-use of 'consumer protection' may be harmful to academic freedom. Federal regulations may cause undue 'paperwork'. Five grounds for arguing against the consumer analogy are: 1) Students are part of the 'production process', 2) Degrees are not homogeneous, 3) No warranties of servicability are implied, 4) Education is not a product - students take what they choose from their educational experiences, and 5) Many institutions are publicly accountable and 'not for profit'.

PETRIK, Eugene V.,

'Programs That Work at Bellarmine College',

New Directions for Higher Education, 7: 13-9.

Presents support for the view that traditional missions and ideals can be furthered rather than destroyed by a market-orientation. Main emphasis is on information gathering and developing useful community relations through media, community involvement and positive admissions office procedures.

PORTUGAL, Joel B.,

'Lessons Colleges Can Learn From Business',

American School and University, 50: 76-8.

Suggests that American colleges and universities are weak on market research and management: they have not used their marketing and communication skills. Identifies six steps: 1) Define the institution - Assess its present position and attractiveness, 2) Analyse the market - competition, types of students, eliminate unsatisfactory products, 3) Position the school - new emerging markets, balancing tradition with change, 4) Formulate a strategy - communicate the changes, 5) Create a distinctive identity, 6) Monitor communications for consistency of image. Although stressing research - schools themselves do little market research.

QUANTY, Michael,

Initial Job Placement for J.C.C.C. Career Students, Classes of 1973-76.

Overland Park, Kansas: Johnson County Community College, 1977.

Follow-up survey of trends in past students' reasons for entering college, assessment of college courses and experiences and current employment status.

RATHMELL, John M.,

Marketing and the Service Sector.

Cambridge, Mass.: Winthrop, 1974.

Argues services need different marketing techniques than do products. Quotes Gilbert Burck 'Knowledge: The Biggest Growth Industry of them All' (Fortune 70, Nov. '64p.128-31) that: Education has quadrupled since 1930 and accounts for 12% of the 'Knowledge Industry'. Related fields were: information machines and communications - 14fold (8%), research and

development - 15fold (10%).

RINCK, Lorna L.,

Current Recruitment Practices in Community Colleges and Other Post-Secondary Institutions.

ERIC Document, ED 169996, 1979.

A review of current recruitment strategies and likely future changes in student objectives and needs, particularly: 1) lifelong learning 2) equal access 3) student attrition 4) telecourses 5) thematic recruitment 6) marketing task forces 7) market segmentation and 8) handicapped and 9) minorities.

RIO SALADO COMMUNITY COLLEGE,

Preparation for Tomorrow : Interim Report.

Phoenix, Ariz.: Rio Salado Community College, 1978.

Provides an overview of a practical evaluation of potential for a college including detailed planning schedules, budgets and organization structure to achieve continuous market research data. Demonstrates steps to achieve a general goal of responding to the learning needs of a changing society.
(selected documents are appended.)

SCANLON, John.,

How to Plan a College Program for Older People.

New York, N.Y.: Academy for Educational Development Inc., 1978.

A comprehensive manual assessing needs and opportunities for colleges in serving older populations. Operating programs at six institutions are discussed,

SCHLEY, Sandra G.,

An Assessment of Educational Markets Among Female Employees in Firms in the Normandale Community College Service Area.

Ph.D. Dissertation, University of Minnesota, 1978.

An example of an in-depth survey to determine the needs of this particular potential market segment.

SHIRLEY, Robert C.,

Strategic Decision-Making in Higher Education.

ERIC Collection of 1978 A.I.R. Forum Papers, 1979.

Identifies six key decision areas: 1) Basic philosophy and values (raison d'etre) 2) General goals and specific objectives 3) product/program/service mix to accomplish goals and objectives 4) customer mix (target markets, current and future) 5) geographic areas to be served 6) competitive emphasis 'differential advantage' (faculty, facilities, etc.). After examination of both the macro and micro environments. Development of a marketing strategy is an iterative process.

SPARKS, Jack D.,

'A Marketing Plan That Works',

A.G.B. Reports, 18: 1: 28-35.

Discussion of Olivet College's (Michigan) successful marketing plan. Reports surveys of students, alumni, townspeople and donors. Analyses the college's customer appeal, prices and product mix.

SPENCER, Richard and DOCK, Stephen,

Organizing an Integrated Planning, Research and Marketing Process.

ERIC Document, ED 174273, 1978.

Contains a comprehensive set of documents relating to organizational review, planning and marketing strategies at Delaware County Community College (Penn.). Particular emphasis is given to self-assessment techniques and determination of the needs of adult learners in the district.

STARK, Joan S.,

The Many Faces of Educational Consumerism.

Lexington, Mass.: D.C.Heath and Co., 1977.

Although not directed to marketing, this book by focussing on the less passive stance adopted by students in the later 1970's, directs attention to two important topics:
1) The truth of promotional messages; and
2) The rights and remedies of consumers dealing with educational institutions.
In dealing with 'strategies for providing consumer information', relationships to aspects of marketing are emphasized.

STECKLEIN, Helen R.,

An Approach to a Market Research Study at a City Community College.

ERIC Document, ED 157564, 1978.

Describes a survey on existing company-sponsored educational programs and a questionnaire to employees to assess unmet educational needs of the business

community around Metropolitan Community College (Minneapolis).

STERN, Rhoda H.,

Applying a Concept of Marketing to the Utilization of Broadcast Telecourses in the City University of New York.

Ed.D. Dissertation, Columbia University Teachers College, 1979.

Based on Kotler's definition of non-profit marketing this study found an unmet market need for more telecourses. Suggests that an ongoing structure of course developers, learners and users should include a marketing organization.

SULLIVAN, Daniel F. And LITTEN, Larry H.,

'Using Research in Analyzing Student Markets : A Case Study',

in, A Role for Marketing in College Admissions,

Princeton, N.J.: College Entrance Examination Board, 1976.

A detailed report of the application of Kotler's systematic market audit to Carleton College (Minnesota). Analysis includes SAT scores, class percentiles, college choice patterns, reasons for non-acceptance (cost, location, reputation), influence of admissions personnel, financial aid offers, parents, high-school counsellors and actions of competitors to Carleton College. Questionnaires appended.

SUSSMAN, Gerald,

Views of Administrators in Higher Education Regarding the Extent and Adequacy of the Marketing Activities Performed by their Organizations.

Ph.D. Dissertation, Boston College, 1979.

Survey of 300 presidents of 4-year colleges found 50% defined marketing in product or sales oriented terms and 70% considered their institution's performance in marketing activities to be adequate. Conclusions are that most colleges don't have a true marketing orientation, a marketing philosophy nor an integrated marketing information flow network. Most institutions would benefit from a regular marketing audit and the appointment of a marketing administrator at vice-president level.

TARPEY, Lawrence and others,

A Preface to Marketing Management.

Dallas, Texas: Business Publications, 1979.

An introductory text giving a broad overview of marketing processes. Although essentially product oriented, this reference contains a chapter on service marketing. A good basic 'first reference' to marketing containing numerous references to recent literature.

TARTAGLIA, Gary R.,

Surveys of Former Students (Summer), Program Completers, Entering Students, Expansion Classroom Students, Former Students(Fall/Winter), and Role of Marketing Techniques.

ERIC Document, ED 151044, 1977.

Report of comprehensive marketing research at Cuyahoga Community College, Warrenville, Ohio. Includes extensive demographic and evaluative data and copies of survey instruments, flowchart of institutional research in the college, and an outline of a 'marketing environment review audit'.

TATHAM, Elaine L. (1),

Community Colleges : Enrollment Trends and Marketing Processes -- Their Impact on Strategic Planning.

ERIC Document, ED 153687, 1978.

Concurrent with declining enrollments has been change in student bodies to more mature students, more women, and more part-time students. Stresses need for cooperation and adaption by all sectors of a college. Gives illustration of data bases and analyses.

TATHAM, Elaine L. (2),

Using Research and Planning in Marketing at Two Year Colleges : Analyzing Enrollment Trends, Retention of Students and Educational Needs.

ERIC Document, ED 168667, 1979.

Reports a survey of goals and preferences of 2,000 high-school students in Johnson County Community College (Kansas) service area. Study also discusses trends apparent in national surveys (ACE and NCES) on sex, reasons for attending colleges, objectives and non-returning students.

THOMPSON, Fred,

'The Cost and Value of Marketing Analysis',

Research in Higher Education, 10: 83-93.

(Also in ERIC, Document ED 161346, 1978.)

Focusses on the problem of uncertainty for institutional planners in matching consumer preferences and institutional behavior. Illustrations of documents used at Mitchell College, New Jersey, for

decision analyses of whether to offer new courses. Includes a 'preposterior' study of the benefits of outlays on market research to reduce levels of uncertainty in educational decision-making.

TRIVETT, David A. (1),

Small College Management : Key to Survival.

Washington, D.C.: American Association for Higher Education, 1973.

Review of difficulties facing small colleges. Suggested responses include cost-cutting strategies and effective admissions marketing and the promotion of institutional uniqueness.

TRIVETT, David A. (2),

'Marketing Higher Education to New Students',

ERIC Higher Education Research Currents,

ERIC Document, ED 096892, 1974.

Suggests a response to slowing down of enrollment growth may be to expand colleges' missions to offer courses in more convenient ways to new markets of housewives, blue-collar workers, elderly and retired people and to high-school and college drop-outs. Colleges will need to be alert to different learning needs of these groups.

TRIVETT, David A. (3),

The Heuristic Potential of Modern Marketing Theory for Higher Education.

ERIC Document, ED 152141, 1978.

Discussion of general applicability of marketing techniques to higher education. Gives an outline of the use of 'multiple dimensional scaling' and 'multi-dimensional unfolding' at Pacific Lutheran University (Washington) to assess an institutional image.

TURNER, William H.,

'Courting the Prospective Student',

in, Marketing Higher Education, D. W. Barton, Ed.,

San Francisco: Jossey-Bass, 1978.

Analysis of high-school seniors' decision-making. The 'admissions funnel' needs to be planned for systematic communication, 'prospect development', 'applicant development', 'admissions decisions' and 'matriculant development'. The admissions process needs ongoing reassessment.

VACCARO, John,

'Marketing on the College Campus : Underdeveloped or Undersold?',

College Board Review, Number 113: 18-23.

Argues that some college promotion has been distasteful. A full marketing concept embraces the 'four P's' : Product - tuition fees are only a share of total costs, little is currently undertaken in the way of differential pricing. Packaging - not only brochures etc., but the total delivery system (new modes e.g. Off-campus, weekends, summer, after hours etc., new technology and use of wider media. Promotion - does not equal 'hard sell' but creative strategies for a marketing mix involving knowledge of 'markets', 'consumers', 'competition', 'publics', and 'environments'. Lists sources for market and consumer research data.

WEIRICK, Margaret C.,

'A Marketing Case History Profile',

in, Marketing Higher Education, D. W. Barton, Ed.,

San Francisco: Jossey-Bass, 1978.

Outline of the marketing plan at Temple University, Pennsylvania. Includes: Enrollment Objectives, Market Objectives, Demographic Characteristics of Temple Students and Market Share Analysis. Marketing effort is based on the four key questions asked by students: 1. What college could I attend? 2. Which colleges do I want to learn more about? 3. Why should I go to Temple? 4. Did I make the right decision?

WILLS, G.,

'The College and its Customers'

in, Coombe Lodge Report,

ERIC Document, ED 146845, 1975.

Proposes a five-stage marketing approach : 1) Identify the market and its segments, 2) Project the future demand, 3) Create market awareness - a) identify 'publics', b) communications media, c) flow of communications, d) media activity e.g. Alumni, institute publications, e) project a truthful consistent message, 4) Distribution - use of technology, videos, etc., 5) Modifying continuously - 'customizing' instruction.

WILSON, Aubrey,

The Marketing of Professional Services.

London, U.K.: McGraw-Hill, 1972.

Contains a nine-point checklist of marketing (Chapter 2). Analyzes differences between marketing for goods

and services. In Chapter 8 : 'Identifying Market Opportunities' gives a checklist for market research. Pages 85-88 are a detailed discussion of setting strategic objectives and decisions that need to be made on 10 key variables.

WISEMAN, T. Jan,

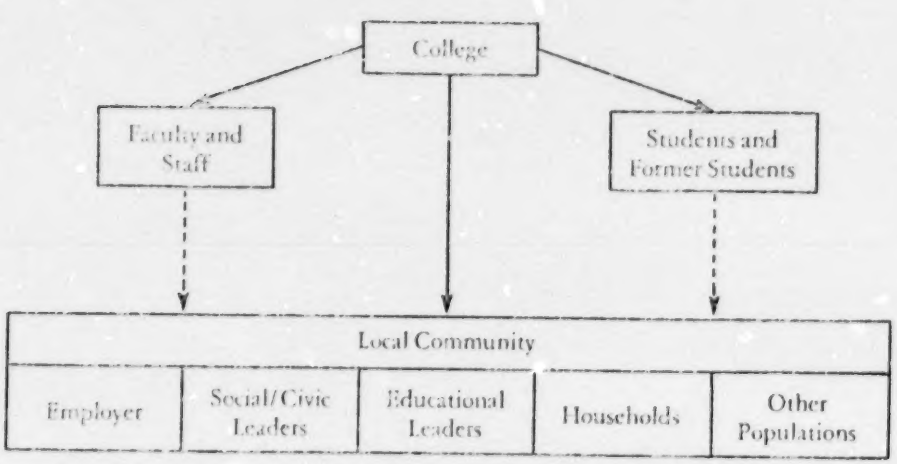
Marketing Information : Community Education Students.

ERIC Document, ED 175493, 1979.

A comparative study of demographic characteristics, career expectations and service requirements of students at the main campus and those at extension centers at Kishwaukee College, Illinois. Analyzes media by which students became aware of course availability.

FIGURE 1

DIRECT AND INDIRECT COMMUNITY IMPACTS

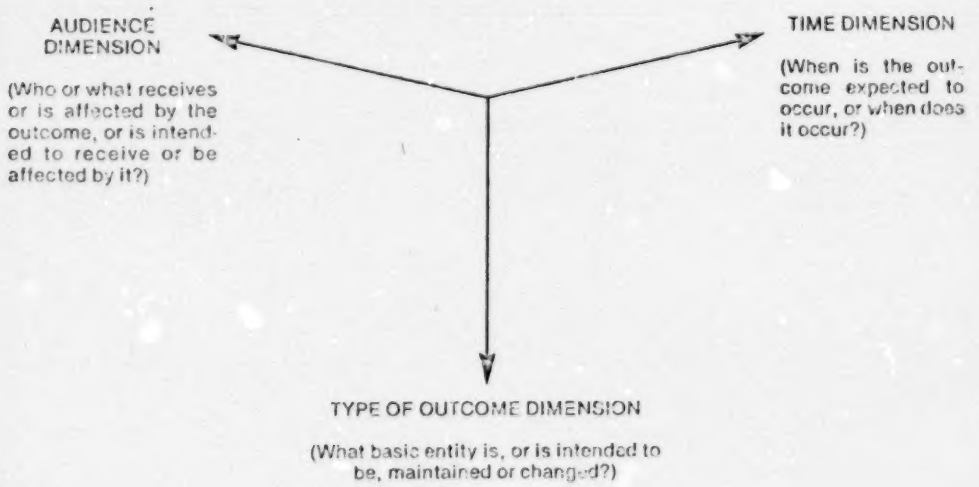


Solid lines indicate direct impact, broken lines indirect impact.

AN OVERVIEW OF THE NCHEMS OUTCOMES STRUCTURE

Postsecondary education outcomes are the end results of the processes that occur within postsecondary education institutions and programs. They include both the direct results of these processes and any short-term and long-term consequences of those direct results. Furthermore, some of them may be intended outcomes while others are unintended—and while outcomes are generically neutral, people will be attaching positive and/or negative values to them. In using the NCHEMS Outcomes Structure, information about outcomes is organized according to three dimensions: (1) the persons, groups, or things that receive and/or are affected by the outcome(s) of concern, or that are intended to receive or be affected by it; (2) whether or not the outcome involves a change in status--maintenance versus change--and the basic, specific entity that is maintained or changed, and (3) when the outcome occurs or is intended or expected to occur. These dimensions have been named "audience," "type-of-outcome," and "time," respectively, and each (except for time) has been assigned a number of specifically defined categories and subcategories. It is intended that those dimensions and categories not of serious concern to a particular user of the Structure will be ignored, or will be modified and adapted to better meet local needs and situations. (The same is true of the various procedures for using the Structure that are described later in this document.)

The Outcomes Structure is illustrated graphically below. For keeping straight the three dimensions, it may help to talk in terms of three Ws—who, what, and when. Who is receiving or being affected by what outcomes and when?


AUDIENCE DIMENSION
(Who or what receives or is affected by the outcome, or is intended to receive or be affected by it?)
TIME DIMENSION
(When is the outcome expected to occur, or when does it occur?)
TYPE OF OUTCOME DIMENSION
(What basic entity is, or is intended to be, maintained or changed?)

The Audience Dimension

Table 1 lists the major (first level of detail) categories of the "audience" dimension. Table 2 shows subcategories (second level categories) separately for each of the major categories. For those who need a shorthand for referring to specific categories or for developing filing systems for particular categories of outcomes information, code numbers are also provided in Table 2 for each category and subcategory. (The coding scheme for the Structure is discussed in detail in Appendix A.) For many applications of the Structure, particular subcategories of this dimension will need to be further subdivided into even finer categories--such as, dividing students in a program into those majoring in the program and those just taking courses in the program, or into disabled students and nondisabled students. Such "extending the Structure," as this additional subdividing of categories of any of the dimensions is called, depends on the philosophy and purposes of the user of the Structure and on the context in which the application is taking place (for example, someone using it in curricular development will probably need different additional categories from someone using it in program administrative planning). Specific procedures for extending the Structure are provided in Part III of this document.

The Type-of-Outcome Dimension

Table 3 presents names, definitions, and code numbers for the five overall (first level of detail) categories of the "type-of-outcome" dimension. Table 4 provides additional levels of detail by indicating names and code numbers for the categories and subcategories into which each of the five broadest categories has been divided. Standard definitions along with example outcome measures and indicators are provided in Appendix B for each category and subcategory identified in Table 4. As with the audience dimension, the structure will often need to be extended on the type-of-outcome dimension. For example, in curriculum development it may be desirable to

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Table 1

MAJOR CATEGORIES OF THE "AUDIENCE" DIMENSION

10. *Individual/Group Clients*—This category refers to persons or groups of persons who are direct clients of the postsecondary education unit of concern and/or their immediate associates, such as family and relatives or peers.

20. *Interest-Based Communities*--This category refers to large groups of people that are identified as entities working toward a *well-defined interest or mission.*

30. *Geographic-Based Communities*--This category refers to large groups of people defined on the basis of *functional territorial boundaries.*

40. *Aggregates of People*—This category refers to subpopulations of people *distinguished by particular characteristics that may indicate common concerns, needs, or wants,* but who do not necessarily have a common interest or mission, and therefore do not constitute communities.

50. *Other Audiences*--Examples would be the natural environment that is affected by university-sponsored research (which in turn would be expected to have impacts on audiences such as individuals and communities) and populations of animals (such as the animals affected by efforts to keep depleted species from becoming extinct or by the development of veterinary medicines).

Table 2

SUBCATEGORIES OF THE "AUDIENCE" DIMENSION

10. *Individual/Group Clients*.—This category refers to persons or groups of persons who are direct clients of the postsecondary education unit of concern and/or their immediate associates, such as family and relatives or peers.

    11. *Students*.—Individuals or groups of individuals who currently are enrolled in the program, institution, or system of postsecondary education.

    12. *Former Students*.—Individuals or groups of individuals who formerly were enrolled in the program, institution, or system of postsecondary education.

    13. *Family and Relatives of Students or Former Students*.

    14. *Peers and Associates of Students or Former Students*.

    15. *Faculty*.

    16. *Staff Other than Faculty*.

    17. *Other Individual/Group Clients*.—An example would be an individual who is none of the above but is served by an advisory service offered by the college.

20. *Interest-Based Communities*.—This category refers to large groups that are identified as entities working toward a *well-defined interest or mission*.

    21. *Private Enterprise Communities*.—Communities where a major purpose is financial remuneration and profit—for example, corporations, small businesses, and farmers.

    22. *Association Communities*.—Communities where members belong on the basis of affiliation rather than employment, such as unions and professional societies.

    23. *Government Communities*.—Communities designed to administer government regulations and services, such as city hall, state department of education, and legislative communities.

    24. *Nongovernmental/Public Service Communities Other than the Institution Producing the Outcome*.—Nonprofit service organizations, such as schools, hospitals, welfare agencies, philanthropic foundations, colleges (other than the college producing the outcome), and research organizations.

    25. *Institution or Institutional Unit Producing the Outcome*.—The postsecondary education institution and/or units within that institution that are perceived as the producer/facilitator of the outcome(s) of concern.

    26. *Other Interest-Based Communities*.—An example would be an ad hoc coalition task force of representatives from two or more of the above areas.

30. *Geographic-Based Communities*.—This category refers to large groups defined on the basis of *functional territorial boundaries*.

    31. *Local Community*.—A township, city, county, metropolitan area, or other type of locality having particular boundaries. It is not necessarily restricted to the legal or jurisdictional boundary, but the functional one in which the impact of the institution is (or should be) directly and physically felt. The boundaries will vary with the institution/program and outcome of concern.

    32. *The State*.

    33. *A Region*.—An aggregation of states or parts of states.

    34. *The Nation*.

    35. *An International Community*.

    36. *Other Geographic-Based Communities*.—An example would be a research discovery that affects primarily people living in the coldest latitudes, or where it snows heavily.

40. *Aggregates of People*.—This category refers to subpopulations of people *distinguished by particular characteristics that may indicate common concerns, needs*, or wants, but who do not necessarily have a common interest or mission, and therefore do not constitute communities.

    41. *Ability Level Subpopulations*.—Subpopulations defined according to level of ability/proficiency on general intellectual functioning or specific skills—for example, gifted, typical, disadvantaged, or skilled, semi-skilled, unskilled.

    42. *Age Subpopulations*.

    43. *Educational Level Subpopulations*.

    44. *Income Level Subpopulations*.

    45. *Occupation Subpopulations*.

    46. *Physical Disability Condition Subpopulations*.

    47. *Race Subpopulations*.

    48. *Sex Subpopulations*.

    49. *Other Such Aggregates*.

50. *Other Audiences*.—Examples would be the natural environment that is affected by university-sponsored research (which in turn would be expected to have impacts on audiences such as individuals and communities) and populations of animals (such as the animals affected by efforts to keep depleted species from becoming extinct or by the development of veterinary medicines).

divide "intellectual skills" (code number 2250) into the following categories of Bloom's Taxonomy (1956): ability to translate (code 22501), ability to interpret (code 22502), ability to extrapolate (code 22503), ability to apply (code 22504), ability to analyze (code 22505), ability to synthesize (code 22506), and ability to evaluate (code 22507).

One thing should be made clear. No program or institution can hope to *focus* on outcomes within all the categories of Table 4, or perhaps even on many of the categories. Rather, this is a universe of possible outcome categories from which one must *pick and choose* those that are most important, in the light of factors such as philosophy, resources available, and clientele needs. To try to devote primary effort toward accomplishing too many types of outcomes could have disastrous consequences.

Table 3

THE MAJOR CATEGORIES OF THE "TYPE-OF-OUTCOME" DIMENSION

Category Code Number	The Major "Type-of-Outcome" Category Names and Definitions
1000	*Economic Outcomes*—Maintenance or change in economic characteristics and conditions of individuals, groups, organizations, and communities, e.g., in economic access, in economic mobility and independence, in economic security, and in income and standard of living.
2000	*Human Characteristic Outcomes*—Maintenance or change in human makeup and characteristics (other than knowledge and understanding) of individuals, groups, organizations, and communities, e.g., aspirations, competence and skills, affective characteristics, perceptual characteristics, physical and physiological characteristics, personality and personal coping characteristics, recognition and certification, and social roles.
3000	*Knowledge, Technology, and Art Form Outcomes*—Maintenance or change in the knowledge and understanding, technology, or the art forms and works possessed or mastered by individuals, groups, organizations, and communities, e.g., discoveries and inventions, technical developments, syntheses and reformulations of knowledge, new schools of thought in art and works created in those new traditions, renovation of art works.
4000	*Resource and Service Provision Outcomes*—Maintenance or change in the *direct* resources and services (other than those included above) provided to individuals, groups, organizations, and communities, e.g., providing facilities, events, advisory assistance, analytic assistance, teaching, health care, and leadership.
5000	*Other Maintenance and Change Outcomes*—Examples would be: maintenance or change in the format, arrangement, activity, or administrative operation of an organization or institution; maintenance or change in the aesthetic/cultural level of the local community; maintenance or change in family or community activities, practices, and traditions.

Table 4

CODED LISTING OF THE SECOND- AND THIRD-LEVEL SUBCATEGORIES FOR EACH FIRST-LEVEL CATEGORY OF THE TYPE-OF-OUTCOME DIMENSION*

Category Code Number	Entity Being Maintained or Changed
1000	*ECONOMIC OUTCOMES*
1100	Economic Access and Independence Outcomes
1110	Economic Access
1120	Economic Flexibility, Adaptability, and Security
1130	Income and Standard of Living
1200	Economic Resources and Costs
1210	Economic Costs and Efficiency
1220	Economic Resources (including employees)
1300	Economic Production
1310	Economic Productivity and Production
1320	Economic Services Provided
1400	Other Economic Outcomes
2000	*HUMAN CHARACTERISTIC OUTCOMES*
2100	Aspirations
2110	Desires, Aims, and Goals
2120	Dislikes, Likes, and Interests
2130	Motivation or Drive Level
2140	Other Aspirational Outcomes
2200	Competence and Skills
2210	Academic Skills
2220	Citizenship and Family Membership Skills
2230	Creativity Skills
2240	Expression and Communication Skills
2250	Intellectual Skills
2260	Interpersonal, Leadership, and Organizational Skills
2270	Occupational and Employability Skills
2280	Physical and Motor Skills
2290	Other Skill Outcomes
2300	Morale, Satisfaction, and Affective Characteristics
2310	Attitudes and Values
2320	Beliefs, Commitments, and Philosophy of Life
2330	Feelings and Emotions
2340	Morals, Customs, and Standards of Conduct
2350	Other Affective Outcomes
2400	Perceptual Characteristics
2410	Perceptual Awareness and Sensitivity
2420	Perception of Self
2430	Perception of Others
2440	Perception of Things
2450	Other Perceptual Outcomes
2500	Personality and Personal Coping Characteristics
2510	Adventurousness and Initiative
2520	Autonomy and Independence
2530	Dependability and Responsibility
2540	Dogmatic/Open-Minded, Authoritarian/Democratic
2550	Flexibility and Adaptability
2560	Habits
2570	Psychological Functioning
2580	Tolerance and Persistence
2590	Other Personality and Personal Coping Outcomes
2600	Physical and Physiological Characteristics
2610	Physical Fitness and Traits
2620	Physiological Health
2630	Other Physical or Physiological Outcomes
2700	Status, Recognition, and Certification
2710	Completion or Achievement Award
2720	Credit Recognition
2730	Image, Reputation, or Status
2740	Licensing and Certification
2750	Obtaining a Job or Admission to a Follow-up Program
2760	Power and/or Authority
2770	Job, School, or Life Success
2780	Other Status, Recognition, and Certification Outcomes
2800	Social Activities and Roles
2810	Adjustment to Retirement
2820	Affiliations
2830	Avocational and Social Activities and Roles
2840	Career and Vocational Activities and Roles
2850	Citizenship Activities and Roles
2860	Family Activities and Roles
2870	Friendships and Relationships
2880	Other Activity and Role Outcomes
2900	Other Human Characteristic Outcomes
3000	*KNOWLEDGE, TECHNOLOGY, AND ART FORM OUTCOMES*
3100	General Knowledge and Understanding
3110	Knowledge and Understanding of General Facts and Terminology
3120	Knowledge and Understanding of General Processes
3130	Knowledge and Understanding of General Theory
3140	Other General Knowledge and Understanding
3200	Specialized Knowledge and Understanding
3210	Knowledge and Understanding of Specialized Facts and Terminology
3220	Knowledge and Understanding of Specialized Processes
3230	Knowledge and Understanding of Specialized Theory
3240	Other Specialized Knowledge and Understanding
3300	Research and Scholarship
3310	Research and Scholarship Knowledge and Understanding
3320	Research and Scholarship Products
3400	Art Forms and Works
3410	Architecture
3420	Dance
3430	Debate and Oratory
3440	Drama
3450	Literature and Writing
3460	Music
3470	Painting, Drawing, and Photography
3480	Sculpture
3490	Other Fine Arts
3500	Other Knowledge, Technology, and Art Form Outcomes
4000	*RESOURCE AND SERVICE PROVISION OUTCOMES*
4100	Provision of Facilities and Events
4110	Provision of Facilities
4120	Provision or Sponsorship of Events
4200	Provision of Direct Services
4210	Teaching
4220	Advisory and Analytic Assistance
4230	Treatment, Care, and Referral Services
4240	Provision of Other Services
4300	Other Resource and Service Provision Outcomes
5000	*OTHER MAINTENANCE AND CHANGE OUTCOMES*
5100	Aesthetic-Cultural Activities, Traditions, and Conditions
5200	Organizational Format, Activity, and Operation
5300	Other Maintenance and Change

* The two broad categories into which any of the categories listed here can be divided are "maintenance" (a building block of "I am") and "change" (a building block of "I

The Time Dimension

No formal categories and subcategories were assigned to the time dimension because no time categories would apply across all audience categories. Furthermore, even at the broadest level, the time categories of interest would be expected to vary depending on the philosophy of the user of the Structure and the particular need in his or her context. Time is so important in planning, however, that it was still made a dimension of the Structure—and the categories to use were left completely up to the user.

To illustrate how specialized the taxonomy for the time dimension may need to be, Ms. Jean Endo of the University of Colorado at Boulder reported to this writer on recommended times during the year for collecting student outcomes and related data using survey questionnaires—as based on their experiences—and when during the students' college and alumni career different data should be collected. These can be transformed into a "Taxonomy of Times to Consider for Collecting Undergraduate Student Outcomes Data Using Survey Questionnaires," as shown in Table 5.

Table 5

TAXONOMY OF TIMES TO CONSIDER FOR COLLECTING UNDERGRADUATE STUDENT OUTCOMES DATA USING SURVEY QUESTIONNAIRES*

100 Data from Lower Division Students
- 110 Data from Freshman Students
  - 111 Data Collected Prior to Fall Registration
  - 112 Data Collected One Month Following the First Day of Classes in the Fall
  - 113 Data Collected One Month Prior to First Semester Final Exams
  - 114 Data Collected One Month After Spring Semester Classes Begin
  - 115 Data Collected One Month Prior to Spring Semester Final Exams
  - 116 Other, for Example, in the Middle of the Summer Term
- 120 Data from Sophomore Students
  - 121 Data Collected Prior to Fall Registration
  - 122 Data Collected One Month Following the First Day of Classes in the Fall
  - 123 Data Collected One Month Prior to First Semester Final Exams
  - 124 Data Collected One Month After Spring Semester Classes Begin
  - 125 Data Collected One Month Prior to Spring Semester Final Exams
  - 126 Other, for Example, in the Middle of the Summer Term

200 Data from Upper Division Students
- 210 Data from Junior Students
  - 211 Data Collected Prior to Fall Registration
  - 212 Data Collected One Month Following the First Day of Classes in the Fall
  - 213 Data Collected One Month Prior to First Semester Final Exams
  - 214 Data Collected One Month After Spring Semester Classes Begin
  - 215 Data Collected One Month Prior to Spring Semester Final Exams
  - 216 Other, for Example, in the Middle of the Summer Term
- 220 Data from Senior Students
  - 221 Data Collected Prior to Fall Registration
  - 222 Data Collected One Month Following the First Day of Classes in the Fall
  - 223 Data Collected One Month Prior to First Semester Final Exams
  - 224 Data Collected One Month After Spring Semester Classes Begin
  - 225 Data Collected One Month Prior to Spring Semester Final Exams
  - 226 Other, for Example, in the Middle of the Summer Term

300 Data from Alumni
- 310 Data Collected at Graduation
- 320 Data Collected One Year after Graduation
- 330 Data Collected Five Years after Graduation
- 340 Other, for Example, Data Collected 20 Years after Graduation

400 Other, for Example, Data Collected after Students Have "Dropped Out"

*These categories and subcategories are based specifically on the data collection experiences of staff in the Office of the Vice Chancellor for Academic Affairs at the University of Colorado, Boulder. Therefore, they may not be entirely appropriate for other postsecondary institutions.